COMMONWEALTH OF VIRGINIA Department of Environmental Quality



AIR OPERATING PERMIT APPLICATION

General Information

CHECK ALL FORMS THAT APPLY AND LIST ALL ATTACHED DOCUMENTS. For each page, indicate in the blank the <u>quantity</u> of copies attached.

___ INSIGNIFICANT EMISSION UNITS/ACTIVITIES, page 18

___ COMPLIANCE CERTIFICATION, Page 1 of 3, page 19

___ CONTENTS, and DOCUMENT CERTIFICATION, this page

___ GENERAL INFORMATION, page 1

DEQ

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FUEL-BURNING EQUIPMENT, etc., page 3	COMPLIANCE CERTIFICATION, Page 3 of 3, page 21			
PROCESSING, etc., page 4	POTENTIAL to EMIT WORKSHEET, Optional page 1			
VOCs in INKS, COATINGS, STAINS, and ADHESIVES, page 5	INSIGNIFICANT ACTIVITIES WORKSHEET, Optional page 2			
HAPs in INKS, COATINGS, STAINS, and ADHESIVES, page 6	REQUIREMENTS that do not APPLY, Optional page 3			
INCINERATORS for LIQUID and/or SOLID WASTE, page 7	VOC/PETROLEUM LIQUID STORAGE TANKS WORKSHEET, Optional pages 4-6			
LOADING RACKS and OIL-WATER SEPARATORS, page 8 STACK/FUGITIVE EMISSIONS PARAMETERS, page 9 AIR POLLUTION CONTROL EQUIPMENT, page 10 AIR POLLUTION CONTROL/SUPPLEMENTAL INFORMATION, page 11 ANNUAL AIR POLLUTANT EMISSIONS, page 12 POLLUTANTS for which THIS SOURCE is MAJOR, page 13 APPLICABLE REQUIREMENTS, Page 1 of 3, page 14 APPLICABLE REQUIREMENTS, Page 2 of 3, page 15	LIST ATTACHED DOCUMENTS: MAPFACILITY SITE PLAN PROCESS FLOW DIAGRAM/SCHEMATIC MSDSESTIMATED EMISSIONS CALCULATIONS STACK TESTS SUGGESTED DRAFT PERMIT LISTING OF CROSS-REFERENCES STATEMENT AND VERIFICATION OF CONFIDENTIAL INFORMATION			
APPLICABLE REQUIREMENTS, Page 3 of 3, page 16 STREAMLINING APPLICABLE REQUIREMENTS, page 17				
(see other contains and all at in accordance with a system designed to assure that qualified persinquiry of the person or persons who manage the system, or those	CERTIFICATION FORM r side for instructions) ttachments [as noted above] were prepared under my direction or supervision sonnel properly gather and evaluate the information submitted. Based on my persons directly responsible for gathering and evaluating the information, the rue, accurate, and complete. I am aware that there are significant penalties for nprisonment for knowing violations.			
SIGNATURE:	DATE:			
COMPANY				
PRINTED NAME:	REGISTRATION NUMBER:			
TITLE:	TELEPHONE NUMBER:			
Reference: Regulations, 9 VAC 5-80-80.G). See reverse of this form for DEQ Form 805 6/16/97	instructions. Page i			

INSTRUCTIONS FOR CHECKING THE CONTENTS LIST

Under the section on page i entitled "General Information," indicate to the left of each page title the number of sheets of the Form page which have been included in the application package being submitted. Since each page of Form 805 may not apply to your particular facility, each sheet of the submitted application package needs to be numbered, in the lower right corner. Attachments for the application package are to be listed in the area provided under "General Information."

One of the attachments listed in the "General Information" section on page i is a "suggested draft permit." This is <u>not</u> required for initial Title V permits; it is optional. However, the <u>Regulations</u> require a suggested draft permit as part of the application package for minor permit modifications (see 9 VAC 5-80-210.C.2.), group processing of minor permit modifications (see § 9 VAC 5-80-220.B.2.), and significant permit modifications (see 9 VAC 5-80-230.B.2.). For the permit modifications indicated, suggested draft language is necessary only to illustrate the change sought in the permit language. There is no need to submit an entire new permit application or entire draft permit when changing just a few provisions.

In the case of applications covering large facilities, it is permissible to fill out entire forms for individual process areas as well as to list all process areas in order on one form with multiple page copies. This is not to be confused with making separate applications covering a single facility.

Note: while the applicable requirements indicated in this Application will be used to assist in permit preparation, the application will <u>not</u> be incorporated by reference into the resulting permit.

DOCUMENT CERTIFICATION FORM

INSTRUCTIONS FOR USE

The <u>Regulations</u> require that certain documents submitted to the Board or the Department be signed by a responsible official with certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Documents covered by this requirement include, but are not limited to, permit applications, registrations, emission statements, emission testing and monitoring reports, or compliance certifications. The certification should include the full name, title, signature, date of signature, and telephone number of the responsible official. A responsible official is defined as follows (Regulations, 9 VAC 5-80-60.C.):

- 1. For a business entity, such as a corporation, association or cooperative, a responsible official is either:
 - (a) the president, secretary, treasurer, or a vice-president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or
 - (b) a duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.
- 2. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
- 3. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

The certification, text of which is specified in the <u>Regulations</u> (9 VAC 5-80-80.G.2.), is required with all application submittals. Other information submitted in the course of making an application complete is also subject to certification.

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PLEASE READ CAREFULLY

This is an application form for a federal air operating permit pursuant to Rule 8-5 (cited as Chapter 80, Part II, Article 1, 9 VAC 5-80-50 et seq.) of the <u>Virginia Regulations for the Control and Abatement of Air Pollution</u> (hereinafter "<u>Regulations</u>"). The staff of the Department of Environmental Quality (DEQ) reviews all permit applications to determine compliance with the <u>Regulations</u>. The evaluation of a permit application is a detailed and lengthy process, so your application should be submitted in accordance with the established application schedule. Once an application is determined to be complete, you are covered by the "application shield," provided the application was received on time. An "application shield" protects the applicant from enforcement action for failure to have an operating permit, until the Department takes final action on the permit application (see <u>Regulations</u>, 9 VAC 5-80-80.F.) (The application shield does <u>not</u> allow construction of a new or modified emission unit in the absence of a permit to construct under 9 VAC 5-80-10, 5-80-20, or 5-80-30, formerly § 120-08-01, -02, or -03 of the <u>Regulations</u>.) To expedite the permit application and review process, please supply the information requested on the attached forms accurately and completely.

A complete application must include:

- 1. FORM 805 Air permit application form (Form 805), including Document Certification Form
- 2. **MAP** Source location map.

Form.

- 3. **CONFIDENTIAL INFORMATION**JUSTIFICATION

 JUSTIFICATION

 JUSTIFICATION

 JUSTIFICATION

 JUSTIFICATION
- 4. **CALCULATIONS** Sample calculations of emission estimates, and justification of control technology to demonstrate compliance with applicable requirements.
- 5. **ALTERNATIVE SCENARIOS**If desired, furnish information separately (or on duplicate forms) to explain any alternative operating scenarios for which you are applying. An alternative operating scenario means operating under different applicable requirements from normal operation. For example, printing with water-based inks, without emission controls, might be the normal operation in a printing plant, but printing with oil-based inks would involve the use of emission controls under applicable requirements. (See <u>Regulations</u>, 9 VAC 5-80-90.H. and 5-80-110.J.) Additional guidance is given in the instructions for Page 2, "**General Information, Continued**" of this
- 6. **PROCESS** Give SIC code and narrative description of process; provide a process flow diagram for complex, sequential processes.
- 7. **OTHER DATA** Site plans, building dimensions, stack locations if required.

The initial determination of application completeness is based upon "administrative completeness." This means that the appropriate sections of the form have been filled in and submitted, along with required attachments. During the evaluation of the application, questions about its completeness or correctness may arise based on technical considerations. The reviewer may ask the applicant for further information even after the application is deemed complete. Failure to respond to a request for more information may result in loss of the application shield described above (Regulations, 9 VAC 5-80-80.F.6.).

INSTRUCTIONS ARE PROVIDED FOR EACH PAGE OF THE FORM. If you require assistance in completing this application, please contact the regional office for your area. You may contact the regional office to make sure you are using the most up-to-date version of the form; but prior versions, properly updated, are acceptable. The completed application form should be submitted to the regional office. There is no need to copy or return instruction pages.

IT IS A VIOLATION OF STATE REGULATIONS TO OPERATE A SOURCE OF AIR EMISSIONS WITHOUT OBTAINING AN OPERATING PERMIT, IF SUCH A PERMIT IS REQUIRED

[Note: This form is available in WordPerfect 5.1_{TM} format.]

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CONFIDENTIAL INFORMATION

Under the Virginia Freedom of Information Act (*Virginia Code* Chapter 21, §§ 2.1-340 <u>et seq.</u>), all information submitted by the applicant to the Department is available to anyone requesting the information <u>unless</u> the information is considered confidential (proprietary).

<u>Confidential information.</u> To be exempt from disclosure under the Freedom of Information Act, the material must be accepted by the Department as confidential in nature. Confidential information must meet the following criteria:

- 1. Information for which the company has been taking and will continue to take measures to protect the confidentiality;
- Information that has not been and is not presently reasonably obtainable without the company's consent by
 private citizens or other firms through legitimate means other than discovery based on a showing of special
 need in a judicial or quasi-judicial proceeding;
- 3. Information which is not publicly available from sources other than the company; and
- 4. Information the disclosure of which would cause substantial harm to the company.

(Regulations, 9 VAC 5-20-150, formerly § 120-02-30.)

Note: it may be necessary for the Department or the source to share confidential information with EPA. Where the Department provides such information, it will make a claim of confidentiality; where the source provides the information, the source will claim confidentiality. The information will be safeguarded by EPA as well as the Department in accordance with Title 40, Code of Federal Regulations, Parts 2 and 70 (see Part 70, § 70.4(i)(1)).

Confidential information includes, but is not limited to, trade secrets.

<u>Trade secrets.</u> A "trade secret" is defined as information, including but not limited to, a formula, pattern, compilation, program, device, method, technique, or process, that:

- 1. Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
- 2. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

(See Virginia Code §§ 59.1-336 et seq.)

<u>Distinction.</u> The distinction between confidential information and a trade secret is that disclosure of a trade secret can give rise to a private legal action and remedy based on the value of the secret, whereas disclosure of confidential information does not. It is possible, however, for the same item of information to qualify as both confidential and a trade secret. <u>Therefore, if you wish to keep certain information confidential, please indicate this information as such by marking the pages confidential and submitting, as an attachment, the specific justification for each case based on the criteria. Please note that emissions information cannot be marked as confidential. Also, prepare and submit a copy of the appropriate confidential pages with confidential information removed, so that the Department's public records indicate the fact that some confidential information was submitted.</u>

The Department staff will review the material to determine its confidentiality and inform you in writing of the determination.

If you have any questions, please contact the DEQ regional office to which the application is submitted.

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COMMONWEALTH OF VIRGINIA, DEPARTMENT OF ENVIRONMENTAL QUALITY TITLE V AIR OPERATING PERMIT APPLICATION GENERAL INFORMATION:

DATE	REGISTRATION	NUMBER	AIRS IDENTIFICATION NUMBER				
TITLE V PERMIT ACTION SO	TITLE V PERMIT ACTION SOUGHT (Note: see instructions for this page):						
☐ INITIAL OPERATING PER	міт						
☐ RENEWAL OF OPERATIN	IG PERMIT (current per	mit expiration date	:)				
☐ SIGNIFICANT PERMIT MO	ODIFICATION describe	:					
☐ MINOR PERMIT MODIFIC	ATION describe:						
☐ Administrative Permit Am appropriate DEQ Regional Offi			wnership change, please contact the				
SOURCE/FACILITY NAME:		PARENT COMPA	NY, IF ANY:				
OWNER AND MAILING ADDRESS:							
OPERATOR AND MAILING ADDRE	SS, if different from owner:						
TELEPHONE NUMBER:	OTHER STATES	CIRCLE THE NAMES OF AND/OR THE DISTRICT ITHIN 50 MILES OF if any):					
	WV PA MD DC	DE NC TN KY					
EXACT SOURCE LOCATION - INCLU	IDE NAME OF CITY (COUNTY)	AND FULL STREET AD	DDRESS OR DIRECTIONS:				
PERSON TO CONTACT ON AIR PO	LLUTION MATTERS - NAME A	ND TITLE:	PHONE NUMBER:				
			FAX NUMBER, IF AVAILABLE:				
INTERNET E-MAIL, IF AVAILABLE:							
IS THE FACILITY TO BE PERMITTED A	AS A PORTABLE PLANT?	/ES NO IF YE	ES, ATTACH FIRST LOCATION FOR ITS OPERATION.				
DESCRIBE THE PRODUCTS MANUFAI	CTURED AND/OR SERVICES F	ERFORMED AT THIS F	FACILITY (use attachments if necessary):				
LIST THE STANDARD INDUSTRIAL CI	ASSIFICATION (SIC) CODE(S	FOR THE FACILITY:	<u> </u>				
\Box							
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PRIMARY SIC

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GENERAL INFORMATION INSTRUCTIONS

REGISTRATION NUMBER - Provide the official state identification number assigned to your facility by the Department.

AIRS IDENTIFICATION NUMBER - Provide, if available, the AIRS identification number assigned to your facility by the Department. The AIRS identification number consists of the State 2-digit identification (i.e., 51 for Virginia), 3-digit FIPS County Code and the 4- or 5-digit Plant Number.

PERMIT ACTION SOUGHT - check the appropriate box(es). **NOTE:** The Title V permit program, and these forms, involve a detailed delineation of <u>currently</u> applicable emission limits and other requirements. Any request to increase emission limits, or relax other requirements, must be made as an application for a permit to modify pursuant to 9 VAC 5-80-10, 5-80-20, or 5-80-30 (formerly §§ 120-08-01, 120-08-02, or 120-08-03) of the <u>Regulations</u>. In certifying to the application on page i, the signer certifies knowledge of this requirement and entries on this page which accord with it.

- 1. "INITIAL OPERATING PERMIT" means that you are applying for an operating permit.
 - *Note: If you are applying for a permit to construct or modify a facility, as opposed to operating it, please contact the appropriate DEQ regional office and ask for a copy of Form 7.
- 2. "RENEWAL OF OPERATING PERMIT" means that you have an operating permit which will expire in approximately six months and wish to renew it.
- 3. "SIGNIFICANT PERMIT MODIFICATION" refers to a significant change in an existing permit. See 9 VAC 5-80-190 and 5-80-230 of the Regulations. Briefly describe the modification, using additional sheets if necessary.
- 4. "MINOR PERMIT MODIFICATION" refers to a minor change in an existing permit. See 9 VAC 5-80-190 and 5-80-210 of the <u>Regulations</u>. Briefly describe the modification, using additional sheets if necessary.
- "Administrative Permit Amendment" refers to a correction of minor errors, change of address/ownership, requirements for more frequent monitoring or reporting, or other matters; see 9 VAC 5-80-200.

COMPANY AND DIVISION NAME - list the official company name and the division if applicable.

PARENT COMPANY - give the name of the parent company, if there is one.

OWNER AND MAILING ADDRESS - list the mailing address of the owner of the facility on this application.

OPERATOR AND MAILING ADDRESS, if different from owner - fill in if the facility is operated by a person or entity other than the owner.

TELEPHONE NUMBER - list the phone number at the facility.

UNDERLINE OR CIRCLE THE NAMES OF OTHER STATES WITHIN 50 MILES - the Department is required to notify states within 50 miles of a source when a permit is to be written for the source (see 9 VAC 5-80-60.C and 5-80-290.B. of the <u>Regulations</u>). This information will enable the Department to complete its work. Please underline or circle the name(s) of the state(s) and/or District of Columbia within 50 miles of your facility.

FEDERAL TAX IDENTIFICATION NUMBER - indicate the company's federal tax identification number here.

EXACT SOURCE LOCATION - give the facility location indicating street address or directions to the facility. Provide either or both of the following: a map pinpointing the exact source location and showing where the plant property boundaries are; a plant layout with dimensions of all buildings (height, length, width) at the facility indicating all stack and emission point locations by stack or reference number. The DEQ regional office may waive requirements for a map and/or plant layout if sufficient documentation already exists in agency files.

PERSON TO CONTACT ON AIR POLLUTION MATTERS - provide the name and title of the person to contact on air pollution matters.

PHONE NUMBER - phone number of the contact person.

FAX PHONE NUMBER - contact person's fax machine, if available. (Note: shaded boxes are optional. See below.)

INTERNET E-MAIL - contact person's electronic mail address, if available.

IS THE FACILITY TO BE PERMITTED AS A PORTABLE PLANT? - indicate whether the facility can be moved from the current (or proposed) location at a future date. State the first location of the facility; to the extent possible, add anticipated locations within the coming five years. Also indicate when an existing air permit was issued, if applicable.

DESCRIBE THE PRODUCTS MANUFACTURED/SERVICED - indicate the type of business in which this facility is engaged, listing products produced and/or services performed. Use attachments if necessary.

SIC CODE(S) - provide all 4-digit Standard Industrial Classification Code(s) for this facility and for the process(es). Indicate the primary SIC code in the first set of blocks. Use attachments if necessary for additional SIC codes.

NOTES ON SHADING THROUGHOUT THE FORM: A shaded <u>column</u> means that filling in the information is optional with the applicant, but it may be beneficial to complete the column to extend the coverage of the permit shield. A shaded <u>heading</u> alone, without the column, means that the information is sometimes optional and sometimes required: read the instructions to determine which. The optional pages all have shaded titles and are identified as "Optional Page 1," etc.

COMMONWEALTH OF VIRGINIA, DEPARTMENT OF ENVIRONMENTAL QUALITY TITLE V AIR OPERATING PERMIT APPLICATION GENERAL INFORMATION, continued:

COMPANY NAME	DATE	REGISTRATION NUMBER

COMPANT NAME	DATE	REGISTRATION NUMBER
Cross-referenced information. Does this application cross-reference info ☐ YES ☐ NO ☐ If "yes," please cite, on a separate sheet, the docume documents referenced which are not currently on file at DEQ.	rmation from other	r applications or documents? ence was made; attach copies of
Process description (also attach a process flow diagram)		
Products and SIC Code		
Process		
Process Steps		
Emission units		

Emission Unit Description

Alternative Operating Scenarios.

☐ Check here if you are applying for Alternative Operating Scenarios with respect to part or all of your facility. Please read "Overall instructions for alternative operating scenarios" on the back of this page. Alternative operating scenarios may be described within the form or on duplicate form pages (see instructions), or on separate sheets.

Acid Rain Sources.

□Check here if your facility is an Acid Rain source subject to the provisions of Rule 8-7 (9 VAC 5-80-360 through 5-80-700) of the Regulations and to Title IV of the Clean Air Act. Please attach the separate EPA Form, "Phase II Permit Application" (see instructions).

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GENERAL INFORMATION, continued INSTRUCTIONS

CROSS-REFERENCED INFORMATION - Pursuant to EPA's <u>White Paper II</u> (March 5, 1996), an applicant may cross-reference existing information relied upon, or provided, in an application (<u>White Paper II</u>, pages 34-36). The other information must exist and be available to the DEQ, EPA, and the public; the citation must give enough information to allow for its retrieval. In the case of an earlier permit or a permit application, it may be appropriate to include an additional copy to facilitate the Department's procurement of the information to which reference was made. In the case of laws, regulations, etc., a reasonably precise citation will be sufficient. Cross-referencing should be done on a separate sheet of paper.

PROCESS DESCRIPTION - Complete a process description for each distinct production area of the facility. (The facility may include multiple processes and products, multiple products from one process, or one product resulting from multiple processes. If there are alternative operating scenarios, list these separately. Use multiple copies of this page if necessary, or replicate the entire Form as suggested in the instructions for the Contents and Certification page. Attach one or more diagrams to show material flow, identifying which pieces of equipment are involved with specific stages, feed materials, product materials, intermediate materials, and by-products, and showing where emissions to the air result.

Products and SIC Code - indicate the products, if any, resulting from each process. These may or may not be final products; they could be materials or component packages that go on to the next process for further work. Moreover, a process could exist which does not produce a separate product.

Process- Briefly describe each process which emits air pollutants. Indicate how emission units in the process are connected.

<u>Explanation:</u> A "process" as such is not defined in the <u>Regulations</u>. For purposes of air permitting, a process is considered to be the operation of one or more pieces of machinery or equipment, using fuels and/or other raw materials, which is unified or inter-connected, and which emits air pollutants. Two or more processes may have the same SIC code. The exact nature of a process may be a trade secret and identified as confidential information in the application; see page iv, "**Confidential Information**." Considerations for determining separate processes include SIC codes, physical layout, raw materials flow, etc. Support facilities such as power plants and wastewater plants serving multiple processes should be listed as separate processes.

Process steps - In simple terms, describe how the units of the process are connected.

Emission units - Assign a unique emissions unit identification number or other designation, and list each unit or emitting activity, including control equipment, even if it has no applicable requirement. Assign emissions unit identifications for each alternative operating scenario and indicate in the description that it is an alternative operating scenario. Insignificant emission units or activities may be excluded from this list.

Emission unit description - Explain briefly the function of each emission unit relative to the overall process. Where multiple units perform the same function, they may be grouped together for purposes of this description.

Overall instructions for alternative operating scenarios - As indicated on page ii ("Please read carefully"), item 5 of this Form, an alternative operating scenario means operating under different applicable requirements from normal operation. The Regulations do not limit the ways in which the concept can be used. Accordingly, two approaches are acceptable for applying for alternative operating scenarios: (1) list each scenario on a separate line, and assign a unit reference number and scenario number combination that is unique for each scenario, such as "Unit 6, Alt. 1," "Unit 6, Alt. 2," etc. If the alternative scenario is interrelated with others, explain the relationship, using attachments if necessary; (2) use duplicate forms or form sheets to indicate the alternative scenario.

Acid rain sources - A limited number of Title V sources are also "affected sources" under the acid rain provisions of Title IV of the Clean Air Act. Please check the box if your facility is an affected source as defined in 9 VAC 5-80-60.C of the <u>Regulations</u>. If it is, the applicable requirements may be <u>referenced or described</u> on page 14, "**Applicable Requirements**" as well as on the EPA Phase II permit application form (OMB No. 2060-0258). <u>Affected sources emitting NO_x are required to submit their Title IV applications to DEQ by January 1, 1998.</u>

FUEL-BURNING EQUIPMENT AND STATIONARY COMBUSTION ENGINES (EXCEPT INCINERATORS) (BOILERS, TURBINES, GAS/DIESEL ENGINES, KILNS, ETC.):

DATE	REGISTRATION NUMBER
	DATE

UNIT REF. NO.	EQUIPMENT MANUFACTURER AND MODEL NUMBER, IF KNOWN; OTHERWISE, TYPE OF EQUIPMENT (DATE OF MANUFACTURE OR CONSTRUCTION)	MAXIMUM RATED INPUT HEAT CAPACITY FOR EACH FUEL (MILLION BTU/HR)	TYPE OF FUEL (indicate whether primary (P) or standby (S))	TYPE OF EQUIPMENT (Code A)	MAXIMUM RATED OUTPUT (for reciprocating and internal combustion engines; optional for others)	USAGE (Code B)

FUEL-BURNING EQUIPMENT AND STATIONARY COMBUSTION ENGINES INSTRUCTIONS

UNIT REF. NO. - assign a unique reference number for each piece of fuel burning equipment. If numbers have previously been established for inventory purposes, use those same numbers, or attach a list explaining changes. **NOTE:** Where a unit burns more than one fuel, assign a separate line for each, pegged to the unit (i.e., #1A for oil, #1B for the same unit burning coal, etc.).

EQUIPMENT MANUFACTURER AND MODEL, IF KNOWN; OTHERWISE, TYPE OF EQUIPMENT - provide the nameplate information for each piece of equipment, including the date of manufacturer or construction. <u>Note:</u> there is <u>no need</u> to list pieces of equipment that are defined as <u>insignificant activities</u> pursuant to 9 VAC 5-80-710 or -720, <u>unless</u> the failure to list would interfere with the determination or imposition of an applicable requirement. If the manufacturer or model number is not known, describe by size and design type. A date such as "before 1972" is acceptable if sufficient to determine which regulatory requirement applies.

MAXIMUM RATED INPUT HEAT CAPACITY FOR EACH FUEL - provide the manufacturer's maximum rated heat <u>input</u> in Million BTUs per hour based on the nameplate rating or maximum fuel usage. This is needed for fuel-burning equipment other than reciprocating internal combustion engines.

TYPE OF FUEL - identify all the types of fuel that will be burned by each referenced piece of equipment and the corresponding data for each fuel type. If used in a process, relate this to the appropriate process. Indicate whether the fuel is primary or standby by placing a P or an S in the box next to the fuel named. If a piece of equipment uses more than one fuel, use separate lines for each (as indicated above).

TYPE OF EQUIPMENT - use Code A from the Code List, which is reproduced at the end of this Form.

MAXIMUM RATED OUTPUT - provide the maximum rated output capacity in units consistent with your operation. Examples: if a diesel engine is to be installed to power a blower, report the output brake horsepower (also known as mechanical horsepower); if a boiler is to be installed to generate process steam, then report pounds of steam per hour or boiler horsepower; if a turbine is to be installed to generate electricity, report kilowatts of electricity.

USAGE - Use Code B from the Code List (reproduced at the end of this Form).

PROCESSING, MANUFACTURING, SURFACE COATING, AND DEGREASING OPERATIONS:

COMPANY NAME	DATE	REGISTRATION NO.

UNIT REF. NUMBER	PROCESS OR OPERATION NAME (PROVIDE MANUFACTURE OR CONSTRUCTION DATE ¹) AND METHOD OF APPLICATION (if surface coating) ²	ARTICLE BEING PROCESSED, MANUFACTURED, COATED, OR DEGREASED	EQUIPMENT MANUFACTURER AND MODEL NUMBER, IF KNOWN; OTHERWISE, TYPE OF EQUIPMENT	MAX. RATED CAPACITY ³ Units	INPUT OR OUTPUT?

¹ If required to support this application or to meet applicable requirements.

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² Attach complete MSDS for raw materials used or consumed and products manufactured or handled.

³ Specify units per hour for each operation in Tons, Pounds, Gallons, etc., except for storage tanks and bins, which should simply show volume or weight capacity.

PROCESS OPERATION INSTRUCTIONS

Use this page to describe processes and facilities for which a Title V permit is needed. <u>Note:</u> please use this page to begin your description of any volatile organic compound or liquid petroleum storage tanks as well. Note: if you have tanks, you may use the TANKS2 input and fill in appropriate columns on the tanks worksheets (optional pages 4-6). These pages may then be used as documentation, where needed, to support the calculations provided with this Application. Do not list loading racks for petroleum products distribution, or oil-water separators. List them on page 7, "**Loading Racks and Oil-Water Separators**."

UNIT REF. NO. - assign a unique reference number for each entry. If numbers have previously been established for inventory purposes, use those same numbers, or attach a list explaining changes.

PROCESS OR OPERATION NAME AND METHOD OF APPLICATION - specify the type of process or operation, such as: crusher, reactor, press, dryer, storage tank, or something else. Use one line for each process or operation, starting with the initial step in the manufacturing process, followed by succeeding logical manufacturing steps until the process is complete. For surface coatings, list the method of application; if the same coating is applied by more than one method, list separately where possible. If the equipment involved is not of a type subject to a New Source Performance Standard (NSPS), there is no need to include the date of manufacture. If the equipment involved would have been subject to an NSPS had it been built or installed at a later date, it is necessary to show the date, or state that the date in question fell prior to the specific applicability date. Be sure that the terminology used on this page is consistent with that used in the process description provided on page 2, "Title V Operating Permit General Information, Continued" and in the flow diagram included with the application. The provision of the MSDS, and related items in footnote #1 may not be necessary; check with your Regional Office or examine prior permits applicable to the facility to determine whether these items have already been submitted, and whether there are any changes that should be noted. Finally, in this section, there is no need to list pieces of equipment that are defined as insignificant activities.

ARTICLE BEING PROCESSED, MANUFACTURED, COATED, OR DEGREASED - state the nature of the article to which the processing applies.

EQUIPMENT MANUFACTURER AND MODEL NUMBER - give nameplate information or equivalent. The Title V permit must include a listing of the specific equipment permitted; without such inclusion, the owner may lose the right to operate omitted equipment.

MAXIMUM RATED CAPACITY - This box should provide the maximum amount of feed material that the process element can handle in an hour. Specify units of measurement in accordance with the applicable requirement, or, if that is not instructive, with standard industry practices. If you have a throughput limit in your existing permit that is lower than the rated capacity, or if you are proposing such a limit as a voluntary cap under 9 VAC 5-80-100 of the Regulations, list the unrestricted capacity here, but write "restricted" after it in the box. A limit that stems from an applicable requirement needs to be listed on page 14, "Applicable Requirements." Where rated capacities are variable depending on product quality or other characteristics, such as "3 tons per hour at 7% moisture," be sure to explain the relationship, with an attachment if necessary.

INPUT OR OUTPUT? - Some applicable requirements specify an input or an output figure. State here which is the case.

COMPANY NAME DATE REGISTRATION NO.

UNIT REFERENCE NUMBER	MATERIAL (specify)	MATERIAL USE (Code M)	LBS VOC IN I	MATERIAL AS AP	PLIED	MATERIAL VOC DENSITY CONTROL (lbs/gal) METHOD		SOLIDS TRANSFER EFFICIENCY	MAXIMUM EXPECTED MATERIAL USAGE AS APPLIED	
		,	PER GAL MATERIAL	PER GAL MATERIAL LESS H ₂ O & EXEMPT SOLVENT	PER GAL SOLIDS	(Ibs/gal) AS APPLIED	(Code p)		GAL/HR	GAL/YR

VOCS IN INK, COATING, STAIN, AND ADHESIVE MATERIALS INSTRUCTIONS

This page is intended to address volatile organic compounds (VOCs) resulting from application of inks, coatings, stains, or adhesive materials.

UNIT REF. NO. - continue assigned reference number(s) from previous page(s).

MATERIAL - List coatings or other materials that you propose to use in your processes. If there are many such materials, they may be broken into categories (inks, coatings, stains, or adhesives), and separate lines or a separate sheet may be used. A worst-case (in terms of the highest VOC content) example from each category will also suffice for this listing.

MATERIAL USE - Choose the material usage type (Code M) from the Code List (reproduced at the end of this Form), and list the letter or letter and number combination that describes the material use. Use more than one if that individual coating or other formulation has multiple uses. If "Other Material" is selected, describe.

LBS. VOC IN MATERIAL AS APPLIED - List the VOC content of the material as it is applied to the substrate, including any added solvent, in units of (1) Pounds (lbs.) VOC per gallon of material, (2) lbs. VOC per gallon of material, minus water and exempt solvents, and (3) lbs. VOC per gallon of material solids. The above information should be calculated based on material and solvent Environmental Data Sheets, Material Safety Data Sheets (MSDS), or Certified Product Data Sheets (CPDS) available from the supplier or manufacturer. Show calculations, if appropriate. If you have questions, please contact the Regional Office.

MATERIAL DENSITY - List the density of the material as applied to the substrate in units of pounds per gallon (lbs/gal). Show calculations if material is thinned or reduced.

VOC CONTROL METHOD - Choose the appropriate letter and/or number code (Code P) from the Code List (reproduced at the end of this Form). If "Other" is selected, please describe it.

SOLIDS TRANSFER EFFICIENCY - List the transfer efficiency as the ratio of the amount of material solids deposited on the product to the amount of solids in the coating as applied.

MAXIMUM MATERIAL USAGE AS APPLIED - List the maximum expected usage of the individual material or coating type in terms of gallons per hour and gallons per year.

COMPANY NAME	DATE	REGISTRATION NO.

UNIT REFERENCE NUMBER	MATERIAL (specify)	CAS NUMBER	NAME OF HAPs	LBS HAP/GAL OF MATERIAL AS APPLIED

HAPS IN INK, COATING, STAIN, AND ADHESIVE MATERIALS INSTRUCTIONS

This page is intended to address hazardous air pollutants (HAPs) resulting from application of inks, coatings, stains, or adhesive materials.

UNIT REF. NO. - continue assigned reference number(s) from previous page(s).

MATERIAL - As with page 5, "**VOCs in Ink, Coating, Stain, and Adhesive Materials**," list coatings or other materials that you propose to use in your processes. If there are many such materials, they may be broken into categories (inks, coatings, stains, or adhesives), and separate lines or a separate sheet may be used. A worst-case (in terms of the highest percentage of HAP content) example from each category will also suffice for this listing.

CAS NUMBER - Give the name and Chemical Abstract Services (CAS) Number for each hazardous air pollutant.

NAME OF HAPs - List the individual HAP components of the material.

LBS. OF HAP PER GALLON OF MATERIAL AS APPLIED - For each HAP component, list the pounds (lbs.) of HAPs per gallon of material as applied to the substrate. Attach sample calculations, including any emission factors used, and MSDS sheets, if appropriate.

LIQUID AND/OR SOLID WASTE INCINERATORS: (NOT AIR EMISSIONS CONTROL DEVICES)

COMPANY NAME	DATE	REGISTRATION NO.
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UNIT REF.	MANUFACTURER AND MODEL NUMBER	INCIN. TYPE	WASTE TYPE	RATED	BURN CAPACI	ER RATED TY (BTU/HR)	MINIMUM CHAMBER TEMP. (°F)	BURN DOWN CYCLE TIME
NUMBER	(DATE OF MANUFACTURER OR CONSTRUCTION)	(Code C)	(Code D)	CAPACITY (LBS/HR)	PRIMARY	SECONDARY	SECONDARY	(HRS)

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LIQUID AND/OR SOLID WASTE INCINERATORS INSTRUCTIONS

UNIT REF. NO. - assign a unique reference number for each incinerator.

MANUFACTURER AND MODEL - indicate the unit manufacturer and model. Include a diagram of the unit and specify any special features. If the unit is used for energy recovery, provide this information on the "**Fuel-Burning Equipment**" form (page 3 of this Application).

INCINERATOR TYPE - use Code C from the Code List (reproduced at the end of this Form) to indicate all categories applicable.

WASTE TYPE - use Code D from the Code List (reproduced at the end of this Form) and indicate all types burned.

INCINERATOR MAXIMUM RATED CAPACITY - maximum design input capacity in pounds per hour of waste type disposed of in this unit.

BURNER RATED CAPACITY - maximum rated heat input of primary and secondary chamber burners.

MINIMUM CHAMBER TEMP. - Indicate the minimum temperatures which the burner in the secondary chamber is designed to maintain while incinerating waste.

BURN DOWN CYCLE TIME - time in which the unit will continue to completely incinerate the maximum designed charge rate before shutting down or charging a new batch.

Page 7 Instructions

COMPANY NAME	DATE	REGISTRATION NUMBER

UNIT		MAXIMUM HOURLY	LOADING R	OIL-WATER SEPARATORS ONLY	
REFERENCE NUMBER	NAME OF PRODUCT LOADED OR RECOVERED	THROUGHPUT (gallons)	TYPE OF LOADING (Code E)	HATCH VAPOR CLOSURE ON LOADING ARMS (Code F)	TYPE OF ENCLOSURE (Code G)

LOADING RACKS AND OIL-WATER SEPARATOR INSTRUCTIONS

UNIT REF. NO. - assign a reference number for each loading rack.

NAME OF PRODUCTS LOADED OR RECOVERED - for loading racks, list all possible materials loaded for each rack. For oil-water separators, list all possible materials recovered.

MAXIMUM HOURLY THROUGHPUT - this is the expected maximum number of gallons to be loaded from the rack or entering the oil-water separator in one hour.

For Loading Racks Only:

TYPE OF LOADING - assign the corresponding number(s) (Code E from the Code List reproduced at the end of this Form) for each unit.

HATCH VAPOR CLOSURE ON LOADING ARMS - assign the corresponding number(s) (Code F from the Code List reproduced at the end of this Form) for each unit.

For Oil-Water Separators Only:

TYPE OF ENCLOSURE - assign the corresponding number(s) (Code G from the Code List reproduced at the end of this Form) for each unit.

STACK/FUGITIVE EMISSIONS PARAMETERS AND VENT/EXHAUST DATA:

COMPANY NAME	DATE	REGISTRATION NO.
		4

UNIT	FUGITIVE		VENT/STACK INFORM	EXIT GAS PARAMETERS				
REFERENCE NUMBER	EMISSIONS? (Yes/No)	Stack Reference Number	Configuration (Code H)	Height (ft.)	Diameter (ft.)	Velocity (ft./min.)	Volume (acfm)	Temp. (° F.)

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STACK/FUGITIVE EMISSIONS PARAMETERS AND VENT/EXHAUST DATA INSTRUCTIONS

UNIT REF. NO. - continue the unique assigned reference number(s) from previous pages.

FUGITIVE EMISSIONS - Indicate whether there are any fugitive emissions associated with the units described on this page by writing "yes" or "no." (Fugitive emissions are to be listed on page 12, "**Annual Air Pollutant Emissions**.")

VENT/STACK INFORMATION:

Stack Reference Number - one reference number may have more than one exhaust point, but the converse is also true, and more likely. Assign a unique vent/stack number for each vent or stack through which the process or equipment identified by this unit reference number exhausts. Use the same number in describing air pollution control equipment on Page 10 of this Form.

Configuration - indicate the appropriate configuration by using Code H from the Code List (reproduced at the end of this Form).

Height - list the exit height (in feet) from the ground level.

Diameter - list the inside diameter (in feet) of the vent/stack at its exit. For rectangular vents, provide length and width (in feet) of the vent/stack at its exit.

EXIT GAS PARAMETERS:

Velocity - list the velocity in feet per minute of the stack gas as it exits the vent/stack.

Volume - list the volume of the flow in actual cubic feet per minute.

Temp. - list the temperature in degrees Fahrenheit.

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COMPANY NAME	DATE	REGISTRATION NUMBER
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				AIR POLLUTION CONTROL EQUIPMENT				
UNIT REF. NUMBER	VENT/STACK NUMBER	NUMBER KEFEKENCE	E CONTROLLED POLLUTANT	MANUFACTURER	TYPE (USE		% EFFICIENC	Υ
NOMBER	NOMBER	NUMBER	TOLLOTAIT	AND MODEL NUMBER	(USE CODE I OR CODE J)	CAPTURE	DESIGN	ACTUAL

AIR POLLUTION CONTROL EQUIPMENT INSTRUCTIONS

UNIT REF. NO. - continue assigned reference number(s) from previous page(s).

VENT/STACK NO. - assign a unique vent/stack number for each vent or stack through which the process or equipment identified by this reference number exhausts. This number should correspond with the number used on page 9, "Stack/Fugitive Emissions Parameters and Vent/Exhaust Data."

DEVICE REF. NO. - assign a unique pollution control device reference number(s).

CONTROLLED POLLUTANT - list each pollutant emitted from this unit that is controlled by a control device, using separate lines if more than one pollutant is controlled. Indicate with the word "voluntary" if the control device has been installed voluntarily. If work practices are used to control the pollutant, indicate that by saying "work practice" in the box.

Air Pollution Control Equipment:

MANUFACTURER AND MODEL - list the manufacturer and model of the control equipment associated with the pollutant listed in the preceding column, or other information sufficient to identify the control equipment with reasonable specificity.

TYPE - identify the type of control equipment by using Code I or Code J from the Code List (reproduced at the end of this Form). Code I offers a wide array of control equipment types to choose from, and many will not apply to the situation you have in hand. Merely note the codes for the equipment you have, or propose, and make no reference to the rest. Code J is intended for volatile liquid storage tanks and refers to various seal types.

PERCENT EFFICIENCY - CAPTURE - Provide the percentage of emissions from the emissions unit which is sent to or treated by the control device. (List all emissions which are emitted through the control device (as well as those which are not, including fugitive emissions), on page 12, "**Annual Air Pollutant Emissions**." In any case, make sure that the listings on page 12 take into account emissions of both types.)

PERCENT EFFICIENCY - DESIGN & ACTUAL - list the design and actual control efficiency for the control equipment and associated pollutant. The percent efficiency should show the collection or destruction rate of captured emissions, not overall collection efficiency. You should give the actual control efficiency if data exist, and in any event if a test was required; otherwise, give the design efficiency. Note: apart from the case of a required test, you may list the control efficiency on this page, OR list the operating parameters on page 11, "**Air Pollution Control Equipment - Supplemental Information**."

COMPANY NAME	DATE	REGISTRATION NUMBER	
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DEVICE REF. NO.	TYPE (Code I)	LIQUID FLOW RATE(gpm) (Codes I-4,5, 6,7,13,15)	LIQUID MEDIUM (Codes I- 4,5,6,7, 13,15)	CLEANING METHOD (Codes I-9, 10,13,14)	NUMBER OF FIELDS (Code I-9)	NUMBER OF SECTIONS (Codes I- 9,10)	AIR- TO- CLOTH RATIO (fpm) (Code I-10)	FILTER MATERIAL (Code I-10)	INLET TEMP (°F)	REGENERATION METHOD & CYCLE TIME (sec) (Code I-14)	CHAMBE R TEMP. (°F) (Codes I- 11,12)	RETENTION TIME (sec) (Codes I- 11,12)	PRESSURE DROP (in. H ₂ O) (if Codes I- 3,4,5,6,7, 10,13)

AIR POLLUTION CONTROL EQUIPMENT (SUPPLEMENTAL INFORMATION) INSTRUCTIONS

This page is optional, provided the control efficiency has been given on the preceding page, "Air Pollution Control Equipment." However, the information sought on this page may be needed for Compliance Assurance Monitoring (CAM) or for periodic monitoring. The Department may require more information on this point, to establish appropriate monitoring parameters.

DEVICE REF. NO. - continue assigned reference number(s) from previous page(s).

TYPE - identify the type(s) of control equipment by using Code I from the Code List (reproduced at the end of this Form). Code I offers a wide array of control equipment types to choose from, and many will not apply to a given situation. The other columns suggest codes to use from the Code I selection.

NOTE: For the remaining spaces, the applicable control device type numbers (see Code I) for which this information is required are listed in parentheses on the form.

LIQUID FLOW RATE - list in gallons per minute.

LIQUID MEDIUM - specify the type of liquid used in the control equipment, and the Ph. For condensers, specify inlet temperatures of condensing medium (water, glycol, etc.) and inlet temperature of gas stream.

CLEANING METHOD - specify the method of cleaning the control equipment (e.g., a baghouse, No. 10a).

NUMBER OF SECTIONS/FIELDS - list the number of fields or chambers for ESPs (No. 9), or number of chambers for baghouses (No. 10).

AIR-TO-CLOTH RATIO - list in feet per minute or as specified by manufacturer (cubic feet per minute gas flow to square feet of cloth).

FILTER MATERIAL - list the type of material used for the baghouse filters.

INLET TEMP. - list the temperature at the inlet of the control equipment in degrees Fahrenheit.

REGENERATION METHOD & CYCLE TIME - list the regeneration method (steam stripping, hot air, etc.) and cycle time in seconds for adsorbers (No. 14). If regeneration is done offsite, please so state.

CHAMBER TEMP. - list the combustion temperature of afterburner chamber in degrees Fahrenheit.

RETENTION TIME - list the retention time for afterburners in seconds.

PRESSURE DROP - list the pressure drop across the control equipment in inches of water.

ANNUAL AIR POLLUTANT EMISSIONS:

COMPANY NAME

DATE

REGISTRATION NO.

Emission Inventory Citation Option (Please read the instructions before completing this page.)

STATEMENT: "I have reviewed my Calendar Year 19____ emissions update, and I find that it properly accounts for all emissions units except those specified below. The figures which would otherwise appear on this page are shown in the emissions update specified."

The above-referenced emissions data do not agree entirely in regard to unit reference numbers vs. the numbers shown on this form. A list is

attached which explains the discrepancies.

UNIT	VENT/	ENT/ POLLUTANT			ACTUAL	BASIS OF	EXEMPT	BASIS FOR BEING EXEMPT FROM
REF. NUMBER(S)	STACK NO.	Pollutant name	Check if Fugitive	CAS#IF HAP	EMISSIONS Tons/yr.	ESTIMATES (Code K)	FROM FEES?	FEES (Code L)

ANNUAL AIR POLLUTANT EMISSIONS INSTRUCTIONS

The purpose of this page is to convey, in conjunction with the annual emission inventory, information on the actual annual emissions from your facility. The information is needed by the Department and the applicant to assess permit fees, as required by 9 VAC 5-80-340.B. and -C., and also to allow compliance with 9 VAC 5-80-270.C.1.f., relating to public notification of emissions and fuels used. (See <u>Regulations</u>, 9 VAC 5-80-270.C.1.f.)

Emission Inventory Citation Option - If desired, you may check the statement that the prior calendar year's Emissions Inventory reflects the emissions applied for as the basis of annual emission rates and permit fees in the permit. If the emission inventory is to be used in lieu of new submittal of emissions data in this application, you should first review the data and determine it to be both complete and accurate. Note that most sources with Hazardous Air Pollutant (HAP) emissions will need to supplement the emissions inventory. If the emissions data on file with DEQ are incomplete and/or inaccurate, the box may be still checked, and missing or corrected information added in the spaces provided. The second box is to enable you to point out discrepancies in unit reference numbers between the ones used on the Form and those in the Emissions Inventory. If there are discrepancies, please check this box and attach a list which cross-references the unit reference numbers between the Emissions Inventory and this Form.

UNIT REF. NUMBER(S) - continue assigned reference number(s) from previous page(s). For emissions units with **alternative scenarios**, list each scenario on a separate line, and assign a unique unit reference number and scenario number combination that is unique for each scenario, as before. Explain any alternative scenario relationships, using attachments if necessary. List each emissions unit, except those that qualify as insignificant. (To determine whether an emission unit is insignificant, see the "**Insignificant Emission Units/Activities**" and "**Insignificant Activities**" pages of this Application (page 17 and optional page 2), along with 9 VAC 5-80-710 and -720.) Units may be combined, on a pollutant-specific basis, provided the method of quantifying emissions, including any emission factors, is the same for each of the units being combined. In addition, for purposes of determining compliance with applicable requirements, quantification of emissions may need to be shown on a unit-specific basis on the "**Applicable Requirements**" pages (pages 14-16) of this Form.

VENT/STACK NO. - use the unique vent/stack number previously assigned for each vent or stack.

POLLUTANT - list each pollutant on a separate line under the heading "**Pollutant name**," and indicate whether it is fugitive in the column entitled "**Check if fugitive**." List stack and fugitive emissions separately if calculated by different means, and indicate whether the pollutant is fugitive in the box to the right of the listed name. The following pollutants need to be included:

PM₁₀ (particulate matter ≤ 10 µm aerodynamic diameter) (<u>Do not list opacity as a pollutant on this page.</u>)

Sulfur dioxide (SO₂)

Nitrogen oxides (NO,)

Volatile organic compounds (VOCs) (see definition in 9 VAC 5-80-20). Do not include acetone as a VOC. Do not include perchloroethylene, but list it as a hazardous air pollutant (HAP). Do not include Title VI pollutants: (a) hydrochlorofluorocarbon, HCFC 225ca, (CAS # 422-56-0); (b) hydrochlorofluorocarbon, HCFC 225cb (CAS # 507-55-1); or (c) hydrofluorocarbon, HCFC 43-10mee (CAS # 138495-42-8).

Carbon monoxide (CO)

Lead (Pb)

Reduced sulfur compounds (TRS)

Sulfuric acid mist (H₂SO₄) (Do not include SO₃ or sulfuric acid mist emissions resulting from fuel combustion, as these are treated as SO₂ in emission factors.

Hazardous air pollutants (HAPs) (Any pollutant subject to a standard promulgated under § 112 or other requirements established under § 112 of the federal Clean Air Act (CAA), particularly §§ 112(b), 112(d), 112(g)(2), and 112(j), but not any pollutant that is a regulated pollutant solely because it is subject to a standard or regulation under § 112(r) of the CAA. **Note:** Hazardous components of PM₁₀ and VOC emissions should be identified separately by component and listed on this page as specific hazardous pollutants, but do not need to be quantified.

CAS # IF HAP - list the Chemical Abstract Services (CAS) number.

ACTUAL EMISSIONS - list the measured or calculated emission of each pollutant in tons per year. <u>NOTE:</u> If you have several units emitting the same pollutant but it is difficult to assign a quantity to each, combine the units in the "Unit Reference Number" column and combine the total emissions of the pollutant. For example, one line in the chart may say, under the respective columns, Unit reference numbers: "1-4," pollutant: "SO₂," actual emissions: "120 tons/year." This information should take account of emissions through the control device as well as those which do not go through a control device.

BASIS OF EMISSION ESTIMATES - indicate how emissions listed have been derived by using Code K from the Code List. Attach a sample calculation for each different equation, and emission factor used. Show the source of the emission factor, including the edition number if EPA publication <u>AP-42</u>, or similar works, are used.

EXEMPT FROM FEES? - certain pollutants are not included in the total emissions upon which fees are based. If the pollutant fits one of these categories, mark an "X" in the space.

BASIS FOR BEING EXEMPT FROM FEES - select one of the categories in Code L from the Code List if a fee exemption applies. Note that an emission is not exempt from fees simply because it is fugitive.

Page 12 Instructions

POLLUTANTS FOR WHICH THIS SOURCE IS MAJOR:

COMPANY NAME	DATE	REGISTRATION NUMBER
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Use these tables to indicate the pollutants for which this source is major, pursuant to 9 VAC 5-80-90.D.1. in the <u>Regulations</u>. Criteria pollutants should be listed first; the source is major for a criteria pollutant if it has the <u>potential to emit</u> 100 tons per year (TPY) or more (50 TPY of VOC or NO_x in serious ozone non-attainment areas). Hazardous air pollutants (HAPs) come next and require CAS numbers; a source is major for HAPs if it has the <u>potential to emit</u> 10 TPY or more of any one HAP, or 25 TPY or more of any combination of HAPs. Other regulated air pollutants, from NSPS or Title VI, are major at 100 tons per year (<u>potential to emit</u>) and should be listed last; see instructions.

Pollutant name	CAS number if the pollutant is a HAP	Actual emissions give total amount per year, if known	Potential to emit - give total per year, if known

POLLUTANTS FOR WHICH THIS SOURCE IS MAJOR INSTRUCTIONS

The <u>Regulations</u> require, as part of the application, a description of all pollutant emissions for which the source is major and all emissions of regulated air pollutants (9 VAC 5-80-90.D.1.). Please note that it is the "potential to emit" quantity which establishes major source applicability for the Title V permit process.

EPA's White Paper II, to which the Department subscribes as a matter of policy, allows sources to stipulate that they are major sources as a means of streamlining the application process. When stipulating, sources need not demonstrate the applicability of the Title V rule, such as by indicating the quantity of annual pollutant emissions (White Paper II, pages 32-34).

To comply with the <u>Regulations</u> and meet the spirit of <u>White Paper II</u>, the Department requires that you indicate the pollutants for which your facility is major on this page (and additional sheets thereof, if needed) and asks that you quantify the actual emissions if possible.

POLLUTANT NAME - Indicate, on each line, the name of a pollutant for which the source is major. Remember the major source emission thresholds mentioned on the form; for regulated pollutants other than criteria pollutants or HAPs, the major threshold is whatever the applicable requirement (typically, but not always, a New Source Performance Standard or NSPS) says it is. In addition to NSPS, other sources of applicable requirements for other regulated pollutants are Title VI of the federal Clean Air Act and regulations promulgated by EPA thereunder, and regulations adopted pursuant to a state law. As indicated on the front of this form, please list the pollutants in the following order: criteria pollutants, HAPs, NSPS pollutants, and Title VI pollutants.

CAS NUMBER IF HAP - If the pollutant named is a HAP, give the CAS number next to it.

ACTUAL EMISSIONS (optional) - Indicate, if known, the actual annual emissions of the pollutant in question. This information may be available from your most recent Emission Inventory submission or from page 12 of this Form, "**Annual Air Pollutant Emissions**."

POTENTIAL TO EMIT (optional) - Indicate the potential to emit for the pollutant in question, if known. Potential to emit is calculated using enforceable emission and throughput limits, if such exist or are being created.

APPLICABLE REQUIREMENTS, page 1 of 3:

COMPANY NAME

Unit Ref. No.	Brief Description of Applicable Peguirement	Pollutants	Citation	Voluntary	Linkage Number to
onit Rei. No.	Brief Description of Applicable Requirement Note: if an applicable requirement includes provisions with a future- effective date, during the permit term, indicate the effective date.	Poliutants	Citation	Limit? (Yes/No)	Linkage Number to Next Pages
	<u> </u>				

DATE

REGISTRATION NUMBER

APPLICABLE REQUIREMENTS, page 1 of 3 INSTRUCTIONS

This page and the three which follow it will, when completed, provide a concise description of the requirements applicable to your facility, the monitoring done to ensure compliance with those requirements, and (on page 17, "Streamlining Applicable Requirements") any opportunities you have taken to simplify or streamline requirements. The "linkage number" (see instructions below) is intended to aid you and the Department in analyzing these requirements and their monitoring and streamlining throughout these "Applicable Requirements" pages and the "Streamlining Applicable Requirements" page.

Possible sources of applicable requirements include the <u>Regulations</u>, previously issued permits, federal New Source Performance Standards (NSPS), Consent Agreements, and Orders of the State Air Pollution Control Board. Other sources of applicable requirements include, but are not limited to, Title 40 of the <u>Code of Federal Regulations</u> (CFR), Parts 50 through 80. (See also optional page 3, "**Requirements which do <u>not apply to the source</u>.") Voluntary emission caps are applicable requirements created through the permit process. <u>Acid rain sources are subject to requirements under Title IV of the Act</u>, which are reflected in 40 CFR Parts 72 through 78, and Rule 8-7 of the <u>Regulations</u> (9 VAC 5-80-360 through 5-80-700).**

Use this page to state the applicable requirements. These can apply to part or all of the facility and include emission limits, opacity limits, production throughput or hours of operation limits, regulated specifications of fuels or materials, work practices, emission testing, monitoring, reporting, and other matters. The focus of this page is on emission and operating limits; the next two pages are used for monitoring, record-keeping, and reporting.

UNIT REFERENCE NUMBER - Fill in as appropriate, with numbers or description. You are encouraged to write "general" in this space to cover applicable requirements such as general or specific work practices. For example, "Water the dirt driveway every four hours" is a specific work practice; "Water all dirt roads every day" is a general one. Another example is the application of general requirements such as the opacity rules (Rule 4-1 for existing sources and 5-1 for new or modified sources); these may apply to a group of units ("all units in Process Area A") or to specific units ("reconstructed Unit #6 in Area A").

BRIEF DESCRIPTION OF APPLICABLE REQUIREMENT - Indicate what the cited provision requires in regard to the emission unit or work practice cited. A requirement may apply generically to two or more emission units or work practices, in which case it need be described only once (see above). Note: applicable requirements include those with future-effective dates. Thus if you know of a requirement which has been promulgated, which has compliance deadlines or an effective date during the five-year Title V permit term, please state this requirement and its effective date.

POLLUTANTS - Indicate the pollutants to which the applicable requirement applies. Please indicate each pollutant on a separate line, with the corresponding time frame for measurement of its emission rate.

CITATION - For each emission unit or work practice subject to an applicable requirement, cite the regulatory or legal provision which applies (examples: (1) "Regulations, 9 VAC 5-80-90.1.1." (compliance status); (2) "Virginia Code § 10.1-1314" (permitting authority); (3) "Permit dated x/xx/93, condition #21."). Citation may include reference to an existing permit condition by listing the date of the permit and the condition number of the specific requirement, without quoting its language. However, if an existing permit condition contains language that combines two or more applicable requirements in a single numbered condition, these should be split up into single applicable requirements, and reworded. If a new condition is being added to make an existing condition enforceable or add missing monitoring, record-keeping or reporting requirements, list the citation as an appropriate sub-section of 9 VAC 5-80-110. If a voluntary cap is being added (see "New Voluntary Limit" below), list the citation as 9 VAC 5-80-100. When an applicable requirement is derived from a permit condition, it is not necessary to include a citation of the state regulation underlying that condition. However, where the permit condition incorporates a regulatory provision by reference, and the provision articulates an applicable requirement, the citation should be given.

VOLUNTARY LIMIT? - Indicate "yes" if you are applying for a new emission limit or regulatory requirement voluntarily undertaken to (1) enable you to avoid an otherwise applicable requirement, (2) comply with another requirement (as in streamlining multiple applicable requirements), (3) eliminate an obsolete or unnecessary term from a previous permit (see page 18, "Streamlining Multiple Applicable Requirements"), or (4) include an additional state-only requirement as an applicable requirement (as allowed by 9 VAC 5-80-300). Otherwise, indicate "no." The voluntary limit or requirement should, of course, be identified on this page, and addressed appropriately in the following pages.

LINKAGE NUMBER TO NEXT PAGES - Put a code number here that enables you to continue the analysis of these applicable requirements on the next three pages without resorting to a new, duplicative description.

Page 14 Instructions Sheet No.

APPLICABLE REQUIREMENTS, page 2 of 3

COMPANY NAME REGISTRATION NO.	COMPANY NAME	DATE	REGISTRATION NO.
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REQUIREMENTS WHICH APPLY TO THE SOURCE:

Linkage Number from Previous Page	Existing Monitoring Method Requirement	Existing Monitoring Frequency Requirement	Citation for Required Monitoring	Measured or Estimated Results (Compliance Status)	Basis of Results (Code K)	Subject to CAM? (Yes/No)

APPLICABLE REQUIREMENTS, page 2 of 3 INSTRUCTIONS

Just as the preceding page is intended to describe the requirements which apply to your facility, this page is intended to describe some of the monitoring provisions which enable you to track compliance with those requirements.

LINKAGE NUMBER FROM PREVIOUS PAGE - Use appropriate numbers from the right column of the table on page 14, "**Applicable Requirements, page 1 of 3**" to start this page off, enabling yourself and the Department to track the monitoring provisions with the appropriate applicable requirements.

EXISTING MONITORING METHOD REQUIREMENT - Describe the way in which you monitor compliance with each applicable requirement pursuant to the existing permit for your facility.

EXISTING MONITORING FREQUENCY REQUIREMENT - Indicate the frequency of required monitoring for each applicable requirement pursuant to the existing permit for your facility.

CITATION FOR REQUIRED MONITORING - Cite the appropriate regulatory or legal provision which imposes the monitoring requirements described in the preceding columns.

MEASURED OR ESTIMATED RESULTS OR COMPLIANCE STATUS - give the emission rate, throughput, etc. as measured or calculated, converted if necessary to the same units as the allowable emission rate in the applicable requirement. If the requirement is not quantifiable, indicate whether it is met.

BASIS OF RESULTS - 1. Quantifiable results. If a measurable result is based on a stack test or continuous emission monitor (CEM), and data have previously been provided to DEQ, cite the specific report in which the most recent data are to be found; if data have not previously been submitted, attach a copy of the test report summary, or a summary of the most recent year's CEM data. Similarly, if based on a material balance which has been submitted to the DEQ, cite the appropriate report where the data may be found; if not previously submitted, attach a sample for each separate calculation which uses a different formula. If emission factors are used, be sure to list the source. If the latest available EPA emission factors (found in EPA publication AP-42) are not used, attach documentation to validate the emission factor chosen. For either material balances or emission factor calculations, if one calculation is attached to represent several others, list which stated emissions it represents. In the case of petroleum storage tanks, attach a sample calculation for each type and size of tank (note: Optional Pages 4 through 6 of this Form, "Volatile Organic Compound/Petroleum Liquid Storage Tanks, pages 1 through 3" may be helpful in this regard. It is permissible to submit a predictive model for emissions other than the accepted sources specified above, but in each case the model should be accompanied by sufficient explanation. Finally, convert measured units to the terms used in the applicable requirement. In some cases, it may take more than one line per pollutant, such as when a pre-existing permit condition refers to multiple pollutants or averaging times. An example would be to cite the requirement (e.g., 7/17/92 permit, condition #18), indicate the allowable emission rate(s) (e.g., pounds per hour and tons per year of VOC and NO₂), and indicate the measured rate in appropriate terms. See Code K in the Code List (reproduced at the end of this Form).

2. Non-quantifiable results. Indicate how the compliance was determined. Examples of the use of this page for non-quantifiable applicable requirements: (1) a fuel storage tank has a requirement to be "painted white, silver, or other light color," for which the compliance status, shown in the "Measured or Estimated Results (Status of Compliance)" column, is "met" or "in compliance" and the "Basis of Results or Status" is "Tank is painted white." (2) Another example: a facility has a requirement to perform compliance testing by a certain date or at a certain frequency. While the results of the test would be quantifiable, the act of performing the test(s) over time would not; both results should be reported on this page.

SUBJECT TO CAM? - Indicate here, with "Yes" or "No," whether this specific unit/pollutant/applicable requirement combination is subject to the new EPA Compliance Assurance Monitoring (CAM) Rule (if promulgated at the time of application). If the CAM rule has not been promulgated, leave this box blank.

COMPANY NAME DATE REGISTRATION NO.

Linkage Number	Record-keeping Requirement	Reporting Requirement	PERIODIC MONITORING						
from Previous Page			Parameter Measured	Method	Frequency	Acceptable Range	Verified by	Required Data Capture (%)	Required Compliance (%)

APPLICABLE REQUIREMENTS, page 3 of 3 INSTRUCTIONS

LINKAGE NUMBER FROM PREVIOUS PAGE - Continue the linkage numbers from the right column of the table on the page 14, "**Applicable Requirements, page 1** of 3" and the left column of the table on page 15, "**Applicable Requirements, page 2 of 3**" to this page, to track record-keeping, reporting, and periodic monitoring requirements applicable to your facility on the basis of the requirements stated in the preceding pages.

RECORD-KEEPING REQUIREMENT - Record-keeping requirements enable you to develop a record of compliance with applicable requirements. They are also the basis for making periodic progress or other reports to the Department or EPA on the state of your facility's compliance (or compliance progress). The requirements stated here may well end up in the Title V permit.

REPORTING REQUIREMENT - Reporting requirements are those things that must be reported, on a periodic basis, to the Department. These, too, are based on applicable requirements in old permits, existing rules, or other standards that may apply.

PERIODIC MONITORING - DEQ is required by regulation to include "periodic monitoring" requirements in the permit to cover each applicable requirement, where continuous demonstration of compliance is not otherwise provided, such as mandated continuous emission monitoring (<u>Regulations</u>, 9 VAC 5-80-110.E.). Periodic monitoring may involve direct emission measurements, but more often is a measurement of related parameters that ensure the proper operation of the control equipment or other method of compliance. While this section is optional, it is strongly recommended that the applicant provide DEQ with this information.

Parameter Measured - indicate what is being monitored. Be sure to be specific, such as "temperature downstream of catalytic incinerator," not just "temperature."

Method - if the Compliance Assurance Monitoring method and the applicable requirement are one and the same, citation by regulation or permit condition number is sufficient. If the scheme is not so specified, the test method, instrumentation to be employed, and measurement point location need to be listed, using additional pages as required. Diagrams showing receptor probe location are recommended but not required if the location is adequately described.

Frequency - indicate the time interval at which the measurement will be made, such as "hourly," "daily," "monthly," or "continuously" (in the case of a continuous emission monitoring device, or CEM). If measurements will be made only under certain circumstances (such as while burning coal but not other fuels), or at varying frequencies depending on circumstances, provide all such details as <u>alternative scenarios</u>, if in fact they are being submitted as such.

Acceptable Range - give the range of measured values that would show compliance with the applicable requirement. If measured values have to be plugged into a formula to provide meaningful data, provide the formula.

Verified by - describe how any method that measures a surrogate parameter rather than actual measurement of the applicable requirement relates to it. Attach test data, design specifications, or other data to support the fact that the unit complies with the applicable requirement provided the parameter is maintained in acceptable range. If this documentation has been previously submitted, it may be cited rather than resubmitted.

Required Data Capture (%) - give the minimum acceptable rate of proper functioning of the measurement system, or, alternatively, give the maximum deviation rate.

Required Compliance (%) - give the minimum rate at which measured values must be in acceptable range, or, alternatively, give the maximum deviation rate.

Page 16 Instructions

STREAMLINING APPLICABLE REQUIREMENTS:

COMPANY NAME	DATE	REGISTRATION NO.	l
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Linkage Number from Applicable Requirements	Requirement(s) or permit term(s) to b	oe "streamlined"		Suggested replacement or hybrid requirement		
Requirements pages	description	citation	reason			

STREAMLINING APPLICABLE REQUIREMENTS INSTRUCTIONS

Proposing new source review permit terms for exclusion and proposing the streamlining of multiple applicable requirements for a single emissions unit are prerogatives of the Title V applicant under EPA White Papers I and II, respectively. These distinct but related concepts are described here. If these actions are taken, this page of the Form contains requirements that must be met so that DEQ can effectively evaluate and permit the approach.

General guidance, New Source Review Terms proposed for deletion/revision. Some new source review (NSR) permit terms may not need to be incorporated into the Title V permit because they are obsolete, irrelevant, or both. For example, a term relating only to the original construction of the source may have no relevance to the way in which the source operates. Pursuant to EPA's White Paper I, such a term could be proposed for exclusion from the Title V permit. Similarly, a term which does not aid in ensuring compliance with an applicable requirement may be environmentally insignificant and thus could also be proposed for exclusion. Candidates for NSR terms that could be excluded include (1) information incorporated by reference from a new source review application, (2) construction terms superseded by terms relating to source operation. Excluding NSR terms is not automatic on the part of DEQ; it is a case-by-case determination. (See White Paper I, pages 12-13.)

General guidance, Multiple Applicable Requirements. EPA's White Paper II states that it is acceptable, where two or more requirements apply to a single emission unit, to propose that the more stringent of the requirements be used in the Title V permit (White Paper II, page 6). This ensures compliance with the other requirement(s). Multiple applicable requirements are by nature duplicative, at least to some degree; and a hybrid requirement may be suggested which ensures compliance with them. The advantage to this approach, for source and Department alike, is that the subsuming requirement (the one in which others are subsumed) becomes the permit term and the basis of compliance and the record-keeping and reporting which reflect it; the permit, and the tasks associated with compliance, are both simplified. To make use of this opportunity, it is necessary to identify two or more applicable requirements, whose terms of measurement may or may not be the same, and to describe how the most stringent requirement is stricter than those to be subsumed in it, if such comparisons of strictness are not readily apparent in looking at the requirement.

LINKAGE NUMBER FROM APPLICABLE REQUIREMENTS PAGES - For requirements to be deleted or revised, or for multiple applicable requirements to be streamlined, use the appropriate linkage numbers from the first two "**Applicable Requirements**" pages to track those requirements here.

REQUIREMENT(S) OR PERMIT TERM(S) TO BE "STREAMLINED" - In these columns, describe, cite, and explain the obsolete, unnecessary, or duplicative requirements to be addressed under these two concepts.

Description - Describe the requirement or old permit term.

Citation - Provide the citation in the old permit, the Regulations, or the Code of Federal Regulations (for NSPS, MACT, or other federal requirements).

Reason or Duplication - indicate why the requirement or term is to be discarded, re-written, or subsumed.

SUGGESTED REPLACEMENT OR HYBRID REQUIREMENT - A hybrid requirement may be needed in order to reflect different parts of two requirements for the Title V permit. For example, one previous permit term might have the stricter of two emission limits applicable to a particular unit, while another might have a less stringent emission limit but a better monitoring scheme. A hybrid requirement would partake of the stricter emissions limit and the better monitoring scheme, thereby making effective use of both applicable requirements. Describe the hybrid requirement in this column or on a separate sheet.

INSIGNIFICANT EMISSION UNITS/ACTIVITIES:

ATE REGISTRATION NUMBER
ATE

There is no need to list "named insignificant activities" (exemption code 1 below; see **Instructions**) unless you are uncertain whether the activity/emission unit must be listed in order to aid in the determination of major status, applicable requirements, or fees, or in the imposition of applicable requirements.

UNIT REF. NO.	Emission unit description	Exemption code (see below)	Pollutant(s) emitted	Rated capacity

Exemption codes: 1. Named insignificant emission unit.

2. Insignificant by virtue of emission levels

3. Insignificant by size or production level (rated capacity)

INSIGNIFICANT EMISSION UNITS/ACTIVITIES INSTRUCTIONS

Insignificant activities require a three-part analysis pursuant to 9 VAC 5-80-710.A. of the Regulations. Part 1 is to determine whether your facility has any activities or emission units that are named as insignificant in 9 VAC 5-80-720.A. These have been augmented by EPA's list of "trivial" activities in its July 10, 1995 White Paper for Streamlined Development of Part 70 Permit Applications (cited herein as White Paper I). Such named activities need NOT appear in this application, unless they are necessary to help the applicant or the Department determine major source status, determine or impose applicable requirements, or calculate permit fees; but if they are necessary, they must be listed (see Regulations, 9 VAC 5-80-90.D.1.a.(2) and White Paper I, page 8). Part 2 is listing activities or emissions units, other than those named, which are proposed as insignificant by virtue of uncontrolled emissions levels. If these levels fall below the thresholds given in 9 VAC 5-80-720.B., the activity is insignificant and needs no further analysis in the Application. Note: it is not necessary to give the emissions level; it is necessary to indicate the pollutants in question. Part 3 is listing activities or emissions units, other than those named or those with insignificant emissions levels, proposed as insignificant by virtue of their size or production rate. In this instance, the size or production rate (rated capacity) must be given even though it falls below the threshold, which is in 9 VAC 5-80-720.C. (See 9 VAC 5-80-710.A.3.) You may also develop your own proposed list of insignificant activities or emissions units for the Department's consideration. (See White Paper I, pages 8-9.) Note: A worksheet on insignificant activities is found on Optional Page 2 of this Application. The "Insignificant Activities Worksheet" need not be turned in with the Application.

If in doubt whether to include an emitting activity or piece of equipment in the application, please include it. The Regulations make clear that you must include emissions from any emissions unit if failure to do so would interfere with the determination or imposition of an applicable requirement or the calculation of fees; see 9 VAC 5-80-90.D.1.a.(2). The Department will determine its insignificance and the fact that it needs no further analysis in the application or the permit process. A catalogue of these three categories of insignificant activities is found in 9 VAC 5-80-720, sub-sections A, B, and C of the Regulations. A list of "trivial activities" is found in the appendix to White Paper I.

UNIT REF. NO. - continue assigned reference number from previous pages insofar as it pertains to insignificant activities, or else assign unit reference numbers to the activities or emission units described. The unit reference number is not necessary for named insignificant activities.

DESCRIPTION OF UNIT - describe the emissions unit that is proposed as insignificant because of emission levels or size/production rate. As indicated above, there is no need to mention emission units named in 9 VAC 5-80-720.A. of the <u>Regulations</u> or in the Appendix to <u>White Paper I</u> unless you are in doubt whether such mention is needed.

EXEMPTION CODE - put a "1" if the unit is a named activity, "2" if it is insignificant because of emission levels, or "3" if it is insignificant because of size or production rate.

POLLUTANTS EMITTED - indicate what criteria pollutants or hazardous air pollutants are emitted by the unit in question, if the unit is proposed as exempt because of emission levels (the reference to code 2 at the bottom of the chart). Pollutants need only be identified, not quantified.

RATED CAPACITY - indicate the rated capacity of the emission unit or activity in question, irrespective of why it is listed on the chart. This is required for emission units or activities to be deemed insignificant because of size or production rate, and serves as a verification of a listing by virtue of emission levels.

COMPANY NAME	DATE	REGISTRATION NUMBER	ĺ
COMPANY NAME	DATE	REGISTRATION NUMBER	ı

Compliance Determination. This table of questions and answers, and the compliance steps and compliance schedule information which follows on "Compliance Certification and Plan, pages 2 and 3" (pages 20 and 21 of this Application Form), constitute your compliance certification in accordance with sub-sections 9 VAC 5-80-90.I. and 5-80-90.J. of the

Regulations. Please read the instructions for these three pages before proceeding.

Questions	Answers (Yes, No, or Not Applicable (N/A))	What to do Next: Additional Instructions
Answer one of the following two questions (1a or 1b): 1a. Is the entire facility in compliance with all applicable requirements?	1a.	Answer question 1a or question 1b, but not both. (That is, if you answered question 1b, then the answer to question 1a is "N/A" or not applicable.) If the answer to either question is "no," complete the table on page 20 ("Compliance Certification and Plan, page 2 of 3"), and then go on to question 2. If "yes" is the answer, go on to question 2. In the case of question 1a, the certification means that all applicable requirements are being met at the time of application, including all requirements for
1b. If you have chosen to streamline your application by taking the most stringent requirements from multiple applicable requirements, as described in the instructions on page 17, " Streamlining Applicable Requirements ," are affected portions of your facility in compliance with these streamlined applicable requirements?	1b.	documentation of compliance. In the case of question 1b certification, all applicable requirements are also being met, but the documentation of one or more is accomplished through streamlined methods, as described on page 17, "Streamlining Applicable Requirements." Note that in both cases, certification is for current requirements, not future requirements of the operating permit to be issued.
Will the entire facility be in timely compliance with future applicable requirements taking effect during the permit term?	2.	2. If "yes," go on to question 3a. If "no," explain in the table on page 20. Indicate "N/A" (not applicable) if no known future applicable requirements have been promulgated.
3a. Are any of the compliance commitments elicited in questions 1 and 2 above based on a regulation or an applicable requirement that has <u>not</u> received SIP approval from EPA?	3a.	3a. If "yes," go to question 3b. If "no," go on to question 4.
3b. Does compliance with the non-SIP regulation or requirement ensure compliance with the requirement that <u>has</u> received SIP approval?	3b.	3b. If "yes," please provide information to demonstrate the point (see instructions), then go on to question 4. If "N/A," go on to question 4. If "no," then the requirement cannot be relied upon unless it receives SIP approval. Go on to question 4.
4. Will the facility, or affected portions of it, continue to comply with all applicable requirements with which it is now in compliance during the permit term?	4.	4. If "yes," go on to the next page. If "no," explain in the table on page 21 or use a separate sheet of paper.

COMPLIANCE CERTIFICATION AND PLAN, Page 1 of 3 INSTRUCTIONS

(Compliance Determination)

All sources must address this section ("**Compliance Certification and Plan, pages 1 through 3,**" which are pages 19 through 21) of the Application to indicate compliance status and to make required commitments regarding compliance (see <u>Regulations</u>, sub-sections 9 VAC 5-80-90.I. and 5-80-90.J.). The Compliance Certification pages are not to be used to re-visit earlier decisions on applicability. This first page consists of a number of questions, answered affirmatively or negatively (or as not applicable to your situation), which constitute part of your compliance certification. <u>Please read the instructions for these three pages before proceeding.</u>

Question 1 - enables you to certify current compliance for your Title V permit application, as well as indicating where compliance is not complete; in such case you are referred to the table on page 20, "**Compliance Certification and Plan, page 2 of 3**." After entering information in the table on page 21, make sure that remaining questions on page 19 are addressed. (See page 17, "**Streamlining Applicable Requirements**," and its instructions for more information on streamlining multiple applicable requirements.) Note: Remember that applicable requirements can be found in previous permits and in federal regulations as well as in the Regulations for the Control and Abatement of Air Pollution.

Question 2 - enables you to certify that you are on track to comply with applicable requirements that will take effect during the permit term. (A number of Maximum Achievable Control Technology (MACT) requirements, pursuant to § 112 of the federal Clean Air Act, will be promulgated by EPA in the next few years; this is mainly what we have in mind here.) If you do not anticipate being able to meet future compliance deadlines, please explain on page 20 ("Compliance Certification and Plan, page 2 of 3") or on attached sheets. identify whether you are streamlining the application by combining the elements of multiple applicable requirements (for any unit, group of units, work practices, or for monitoring, record-keeping, or reporting requirements) and proposing the most stringent of these (or a hybrid requirement that ensures the most stringent limits or requirements are observed) as a means of eliminating duplication in the application and permit. (Again, see page 17, "Streamlining Applicable Requirements," and its instructions.) In the event you are not yet in compliance with one or more of these requirements, you are referred to the table on page 20. If, on the other hand, you have no reason to believe that any new requirements will be promulgated during the permit term, indicate "N/A."

Question 3 - indicate whether you wish to base your compliance certification on new rules adopted by the State Air Pollution Control Board but not yet approved into the State Implementation Plan by the EPA. If you do, you have to show that compliance with the new rule will ensure compliance with its predecessor. If the new rule has emission limits, reporting requirements, record-keeping requirements, monitoring requirements, or operating requirements that are the same or more stringent than in the earlier rule, this demonstration is readily accomplished. If the new rule has less stringent requirements, you may not seek this basis for the certification.

Question 4 - a "yes" answer indicates your commitment to stay in compliance.

Additional instructions are presented with each question.

General Note - The above certification is based on normal operation, using methodology described on pages 14 through 16, "Applicable Requirements, pages 1 through 3." During start-up, shut-down, and malfunction, certification is based on use of good air pollution control practices for minimizing air pollution in accordance with 9 VAC 5-20-180.A. (formerly § 120-02-34.A.) of the Regulations. All facilities are covered by the malfunction rule (9 VAC 5-20-180, the entire section) as a generally applicable requirement. This, too, must be listed among the applicable requirements on page 14. On the same page, list any special malfunction, start-up, or shutdown requirements applicable to your facility.

Page 19 Instructions

COMPANY NAME DATE REGISTRATION NUMBER

<u>Compliance Plan.</u> Please use this table to indicate how compliance with applicable requirements, effective now or in the future, will be achieved. A detailed compliance schedule, prepared in accordance with the applicable requirements, is required here or in an attachment (<u>Regulations</u>, 9 VAC 5-80-90.1.3.b.). Return to the questions on page 19 when finished.

Unit reference	Applicable requirement **	Future- effective	How will compliance be achieved? Please describe below.	
number		require- ment? (Yes/No)	Compliance step (Note: progress reports must be provided at least every six months for sources required to have a schedule of compliance to remedy a deficiency.)	Date completion expected

^{**} Citation may make reference to the listings on pages 14-16 ("Applicable Requirements, pages 1 through 3 of 3"), or page 17 ("Streamlining Applicable Requirements" of this Form.

COMPLIANCE CERTIFICATION AND PLAN, page 2 of 3 INSTRUCTIONS

(Compliance Plan)

This table, the "Compliance Plan," is to be used to explain "no" answers to questions 1a, 1b, 2, or 4 on page 19, "Compliance Certification and Plan, page 1 of 3." Please be sure to return to these questions and check your answers against your explanations. In addition, please address questions 3a and 3b before proceeding to the acknowledgments regarding Title VI and section 112(r) pollutants on page 21, "Compliance Certification and Plan, page 3 of 3."

UNIT REF. NO. - continue assigned reference number from previous pages.

APPLICABLE REQUIREMENT - indicate the requirement with which compliance is being discussed. A citation or reference to the "**Applicable Requirements**" pages (pages 14-16) or to page 17, "**Streamlining Applicable Requirements**" is acceptable, provided it is clear.

FUTURE-EFFECTIVE REQUIREMENT? - indicate whether the requirement in question is a "future-effective" requirement as defined above. Note: for risk management plan requirements under § 112(r) of the Clean Air Act, compliance dates are found in 40 CFR Part 68, § 68.10(a) as promulgated in the June 20, 1996 Federal Register (page 31717). (See also "Compliance Step" instructions below.)

HOW COMPLIANCE WILL BE ACHIEVED - this may refer to the addition of control equipment, changes in operations, or other means by which compliance will be achieved.

Compliance step - Where the source is out of compliance, it must have a schedule to achieve compliance, and must file progress reports with the Department at least every six months (Regulations, 9 VAC 5-80-90.I.4.) Identify each step toward compliance for each unit not in compliance at the time of application (or not in compliance with a known or anticipated future-effective requirement). Detailed steps toward not required; the certification on page 21, "Compliance Certification and Plan, page 3 of 3," commits you only to timely compliance with such requirements.

Date by which completion expected - for each step, give a projected date of completion.

OMPLIANCE C	ERTIFICATION AND PLAN, page	ge 3 of 3:	<u> </u>				
COMPANY NAME			DA	ATE	REGISTRATION NUMBER		
CHEDULE: Use the	ere if compliance certifications will be sub	oroposed schedule for compliance certificat	_				
Unit Ref. No(s). Frequency of submission Starting time Methods Used to Determine Compliance							
EKNOWLEDGMEN □ I acknow atospheric ozone pr	ledge that this facility handles or emits o	ne or more Class I or II substances subjec	ct to a standar	d promulgated under or o	established by Title VI of the federal Clean Air Act (CAA) conce		
112(r)(7) is required		e requirements, and will comply in timely fas			k management plan for accidental releases of substances ider in the future, except as indicated in the compliance schedule or		
uiry, the air contam	inant source identified in this application		ith all applical	ole requirements, includio	certify that, based on information and belief formed after reasong but not limited to compliance assurance monitoring requirer		
nature:					_		
ped/printed name:_					-		
to:							

COMPLIANCE CERTIFICATION AND PLAN, page 3 of 3 INSTRUCTIONS

(Compliance Schedule, Acknowledgments, and Certification)

If compliance certifications will be submitted annually, the table need not be filled out. If these certifications are to be submitted more frequently, as called for by some applicable requirements, then the table should be filled out according to the guidance below. In either case, please check the appropriate box above the table to indicate annual submission or more frequent submission of compliance certifications.

Proposed Schedule for Submission of Compliance Certifications During the term of the Air Permit - this schedule is to be filled in if it is dictated by underlying applicable requirements known to the applicant. If that is not the case, the applicant may propose a schedule of compliance certifications, provided that they are scheduled at least once a year. (Regulations, 9 VAC 5-80-90.J.3.). Attach duplicates of this form page as necessary.

UNIT REFERENCE NUMBER - Use the unit reference number being addressed by the certification of compliance.

FREQUENCY OF SUBMISSION - State how often the certification is to be submitted.

STARTING TIME - This can be a set time following permit issuance, which is preferred, or a specified date, which may or may not be appropriate depending on when the permit is issued.

METHODS USED TO DETERMINE COMPLIANCE - Indicate the methods used to determine whether the source is in compliance with applicable requirements (See Regulations, 9 VAC 5-80-90.J.2.).

Acknowledgement regarding handling of Class I or II substances under Title VI: Check this acknowledgment if it applies to you. If it does not apply, do not check it. Note: if your facility includes air conditioning or refrigeration units of any kind which use these substances, you should check the box.

Acknowledgement regarding § 112(r) risk management plan: Check this acknowledgement and initial it to indicate that it applies to your facility and that you are in compliance with current applicable requirements and intend to comply with requirements taking effect in the future, except as indicated on page 20, "Compliance Certification and Plan, Page 2 of 3." If you are not subject to the accidental release risk management plan requirements of § 112(r), do not check this box. Please note that sources which do not check the box, yet are later found to be subject to the risk management plan requirements of § 112(r), will not have the protection of the permit shield in this regard. (Note: The applicability of this requirement is based on the degree to which these substances are handled or stored, not necessarily on whether they are emitted. In other words, the use in a process, or the storage, of a threshold quantity of a regulated substance determines applicability of this 112(r) requirement; see 40 CFR Part 68, § 68.115 for threshold quantity determination and § 68.10(a) for compliance dates.)

COMPLIANCE CERTIFICATION - To certify the compliance status associated with the application, fill in and sign as indicated. (Regulations, 9 VAC 5-80-90.J.1.).

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Page 21 Instructions

POTENTIAL TO EMIT WORKSHEET for Title V applicability

COMPANY NAME	DATE	REGISTRATION NO.
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1. UNIT REF.	2. POLLUTANT	3. ALLOWABL E	4. MAXIMUM THRUPUT	5. LIMIT ON HOURS OR NO. OF	6. THRUPUT LIMIT	7. EMI FAC	SSION FORS	8. UNCON- TROLLED EMISSIONS	9. CONTROL SYSTEM	10. FUGITIVE (UNCAP-	11. CONTROL DEVICE	12. EMISSIONS FROM	13. TOTAL POTENTIAL TO EMIT
NO.		EMISSIONS LIMIT	(PER HOUR OR BATCH)	BATCHES	(LIST SOURCE)	FACTOR	SOURCE	(Ton/Yr)	CAPTURE EFF. (%)	TURED) EMISSIONS	EFF. (%)	CONTROL DEVICE	(Tons/Yr)
							_						_

POTENTIAL TO EMIT WORKSHEET for Title V applicability INSTRUCTIONS

This page may be used to assist in determining whether your facility, or a given emission unit therein, is not only subject to the requirement to apply for a Title V federal operating permit, but also whether it is major for purposes of different applicable requirements, such as Maximum Achievable Control Technology, which are implemented through your Title V permit. The columns are numbered for convenient use and instruction.

- 1. UNIT REFERENCE NUMBER continue assigned reference number(s) from previous page(s). For emissions units with alternative scenarios, see instructions on page 2, "General Information, continued" of this Form.
- 2. POLLUTANT indicate the pollutant in question, using accepted abbreviations.
- 3. ALLOWABLE EMISSIONS LIMIT, IF APPLICABLE if the unit and pollutant have an applicable limit on emissions, indicate the limit itself. Leave this column blank if there is none.
- 4. MAXIMUM THROUGHPUT (PER HOUR OR BATCH) indicate the maximum throughput for the unit and pollutant in question.
- 5. LIMIT ON HOURS OR NUMBER OF BATCHES indicate any limit pertaining to hours of operation or number of batches.
- **6. THROUGHPUT LIMIT (LIST SOURCE)** indicate any throughput limits applicable to the unit and pollutant, and indicate the source of the limit (e.g., prior permit, <u>Regulations</u>, New Source Performance Standards, etc.). The wording of the limit may be directed at the material flow through the equipment in question, or it may in some cases be an indirect limit, where other regulatory limits placed on the facility restrict the maximum utilization of the particular emissions unit. If the limit is on a group of emissions units, rather than individual units, list them together; if the actual emissions would vary depending on which units in such a group are utilized, calculate resulting emissions based on the worst case. (See the introductory instructions on page 14, "Applicable Requirements, page 1 of 3," for origins of applicable requirements.
- **7. EMISSION FACTORS** if potential to emit is being calculated using emission factors from EPA document AP-42 or another source, specify the source, including edition number, and the emission factors used. Proceed with calculations and provide necessary explanation on separate pages. If an emissions unit has more than one emissions factor depending on mode of operation, such as fuel being burned, use the worst case. If regulatory restrictions limit the worst case usage, list the unit on separate lines, one for the maximum permitted at worst case, and another for the rest of the year at the cleaner condition.
- **8. UNCONTROLLED EMISSIONS (tons/year)** using the factors in **Column 7**, determine the uncontrolled emissions of the unit and pollutant in question, at the maximum throughput rate based on 8,760 hours per year of operation, unless there are applicable regulatory limits, which should be incorporated in the calculation.
- 9. CONTROL SYSTEM CAPTURE EFFICIENCY (%) indicate the capture efficiency of the control system. This applies whenever pollutants must be drawn into a collection system using a hood, fan, and ducts. For systems such as boilers, where 100% of exhaust is contained in the system, mark "N/A."
- 10. FUGITIVE (UNCAPTURED) EMISSIONS Fugitive emissions are calculated to determine whether some sources are major for Title V purposes. See the applicability provisions in 9 VAC 5-80-50 and the "major source" definition in 9 VAC 5-80-60.C. of the Regulations. The definition includes, in sub-section b, a list of source types for which fugitive emissions must be considered in determining whether the source has a potential to emit that makes it major for Title V; fugitive emissions must always be considered in the case of hazardous air pollutant (HAP) sources. See also the definition of "potential to emit" in 9 VAC 5-80-60.C. For systems with capture and collection systems, emissions not captured then become fugitive emissions. In other cases, such as dust from outdoor storage piles, all emissions would be fugitive. Note that the regulatory definition of "fugitive emissions" excludes those that could reasonably be captured and passed through a stack, vent or control system, not just those that actually are captured and/or vented. Physical layout of the work area, as well as standard work practices of the industry, should be considered in determining whether uncaptured emissions are fugitive or not.
- 11. CONTROL DEVICE EFFICIENCY (%) this information is available from stack tests, vendor's warranty, mass balance, engineering calculations and estimates, or from AP-42.
- 12. EMISSIONS FROM CONTROL DEVICE (tons/year) this is determined from the maximum uncontrolled emissions, times the capture efficiency, times the control device penetration rate (100% minus collection efficiency).
- 13. TOTAL POTENTIAL TO EMIT (tons/year) This figure is the maximum design capacity of a source to emit a pollutant, as limited by enforceable controls and operating restrictions (see the "potential to emit" definition in 9 VAC 50-80-60.C. of the Regulations). Note that fugitive emissions of non-HAPs are counted toward potential to emit only in cases involving the types of sources listed in subsection b of the "Major Source" definition in 9 VAC 50-80-60.C. However, fugitive emissions may in some cases be counted for other regulatory purposes.

Optional Page 1 Instructions

INSIGNIFICANT		WADVALLET
	$\Delta ($	WINDKSHEEI

COMPANY NAME	DATE	REGISTRATION NUMBER

Complete this form as an aid to determining whether exemptions of insignificant activities approved in Rule 8-5 apply to one or more emissions units at the source in question (9 VAC 5-80-90.A.1.a. and 5-80-720.B. and -720.C. of the <u>Regulations</u>). Note: the emissions of any unit must be included in the application if its omission would interfere with the determination or imposition of any applicable requirement, the calculation of permit fees (9 VAC 5-80-90.D.1.a.(2)), a determination whether the source is major, or a determination whether it is in compliance (EPA White Paper I, pages 8-9).

Table 1: Describe emission units considered insignificant activities by virtue of emissions levels lower than the indicated thresholds. State the emission levels in the appropriate box under the emissions after describing and identifying the unit. (Regulations, 9 VAC 5-80-90.D.1.a.; 9 VAC 5-80-720.B.)

Unit ref. no.	Description of unit	Emissions <5 TPY of:			CO Lead emissions	HAP/112(r) emissions ≤ <u>de</u> <u>minimis</u> /threshold levels <i>(see</i>			
		NO ₂	SO ₂	PM ₁₀	VOC	<100 TPY	<1200 lbs/year (0.6 TPY)	instructions)	

Table 2: Indicate whether any emission units are exempted as insignificant activities by virtue of size or production rate as indicated in this table. State the size or capacity in the

appropriate box under the size or production rate after describing and identifying the unit. (Regulations, 9 VAC 5-80-90.D.1.a.; 9 VAC 5-80-720.C.)

Unit ref. no.	Description of unit	Internal combustion engines Fuel-burning equipment		Tanks/reservoirs for	Emergency generators, ≤ 500			
		Diesel ≤20.3 hp	Gasoline ≤14.3 hp	Natural gas <10 MM BTU	Oil <1 MM BTU	used oil/lubricant < 1000 gallons	hours/year, as per <u>Regulations,</u> 9 VAC 5-80-720.C.4.	

INSIGNIFICANT ACTIVITIES WORKSHEET INSTRUCTIONS

This worksheet is provided as an aid in completing the "Insignificant Emission Units/Activities" form (page 18). It need not be turned in with the Application.

The <u>Regulations</u> require, for insignificant activities associated with facilities subject to Title V permitting, that specification of the activity be sufficient to allow the Department and the source to ascertain whether any requirements apply to the activity (9 VAC 5-80-90.D.1.a.(2)). This requirement serves as a limit on the extent to which named activities (not contemplated on this form) can be left out of the application, and it makes necessary the identification of insignificant activities in the other two categories, i.e., insignificant by virtue of emissions level, and insignificant by virtue of size or production rate. If in doubt whether to include an emitting activity or piece of equipment in the application, or the permit process.

BOTH TABLES:

Unit Ref. No. - continue assigned reference number from previous pages. For emissions units with alternative scenarios, see instructions on page 2, "General Information, continued."

Description of Unit - describe the emissions unit that is deemed insignificant.

TABLE 1: identification of activities which are insignificant by virtue of emissions levels. All of the following boxes refer to emissions levels. The insignificant emissions levels are of uncontrolled emissions in each case.

Emissions < 5 TPY of NO₂, SO₂, PM₁₀, or VOC - indicate the actual annual emissions of each pollutant for each unit. The annual emissions must be less than 5 tons per year for the insignificant exemption to apply.

Emissions < 100 TPY of CO; emissions < 1200 lbs./year of lead; emissions ≤ HAP de minimis/112(r) threshold levels - fill in these boxes the same way as for the first three boxes as indicated above. Bear in mind that the annual emissions of lead must be no more than 1200 pounds per year (0.6 ton per year). The "HAP de minimis level" means emissions of hazardous air pollutants (HAPs) at or below the de minimis emission rates set out in the table in Volume 40, Code of Federal Regulations, Part 63, § 63.44 (see 9 VAC 5-80-720.B.5.). The "112(r) de minimis level" refers to emissions of pollutants covered by § 112(r) of the Clean Air Act. If any of these pollutants are emitted at rates below the least of the following, they are insignificant: (1) the de minimis emission rates in the table at 40 CFR Part 63, § 63.44, (2) the accidental release threshold levels in 40 CFR Part 68, § 68.130, or (3) 1000 lbs. (1/2 ton) per year, whichever is least (see 9 VAC 5-80-720.B.6.). Note that the specific rate must be "less than or equal to" the cited rate in the regulation. (Also note that the insignificant activities analysis pertains to emissions of § 112(r) pollutants; storage or handling of these pollutants brings other requirements of § 112(r), not related to Title V permitting, into play.)

TABLE 2: identification of activities which are insignificant by virtue of size or production.

Internal combustion engines - This category includes portable generators and contemplates, for diesel-fueled engines, that the sulfur content of the fuel does not exceed 0.5%. Another expression of the capacity, for diesel engines, is 51,800 BTU per hour (20.3 horsepower); for gasoline, it is 36,413 BTU per hour (14.3 horsepower). In these categories, the capacity is "less than or equal to" the stated BTU or Horsepower value.

Fuel-burning equipment - This category includes combustion units with heat input levels less than those stated, per hour rated input. For the oil-burning equipment, the fuel contemplated for is distillate oil, with maximum 0.5% sulfur content.

Tanks/reservoirs - Reservoirs and storage tanks for used oil or lubricant with capacities of less than 1000 gallons.

Emergency generators - This category refers to standby or emergency electric generators used less than 500 hours per year, powered by gasoline (911 horsepower or 611 kilowatts maximum), diesel fuel (maximum 6,667 horsepower or 4,476 kilowatts), or natural gas turbines (45,325 horsepower or 30,431 kilowatts maximum).

COMPANY NAME			DATE	REGISTRATION NO.
Use this table if you want the perm	nit to reflect requirements which <u>d</u>	o not apply to the source. These require	ements may include condition	ns from existing permits which no longer apply.
Unit Ref. No., combination, or activity to which requirement does not apply	Citation	Brief description o	of requirement	Why the requirement does not apply (Note: no narrative is required here if the reason is evident in the brief description to the left.)

REQUIREMENTS WHICH DO NOT APPLY TO THE SOURCE: (This page is optional.)

REQUIREMENTS WHICH DO NOT APPLY TO THE SOURCE INSTRUCTIONS

This table provides an opportunity for applicants to make additional use of the permit shield. The permit shield is a required permit term stating that compliance with the conditions of the permit constitutes compliance with all applicable requirements in effect and stated in the permit. It covers requirements which, according to a determination in the permit, are not applicable as well. (See 9 VAC 5-80-140.) With this table, you may request permit terms that expressly shield your facility from application of requirements which might appear to apply, but in fact do not. (It is not to be confused with a request to list every requirement that does not apply.) This page also serves as your request for exemption from otherwise applicable requirements (see 9 VAC 5-80-90.G.).

In brief, if you wish to avoid an otherwise applicable requirement and to have that avoidance provided in the permit as a matter of record, please identify the requirement on this page by following the instructions below.

It should be noted that pre-existing new source review permits, from which applicable requirements are being drawn for either inclusion in or exclusion from this application, may have incorporated permit applications by reference. The Title V permit will not incorporate the application by reference. For example, if the earlier permit application stated a trade name of a product you produce, and you want to be able to produce similar products without the trade name, the presence of the name on the earlier Application will not prevent you from producing similar products without it pursuant to your Title V permit.

UNIT REFERENCE NUMBER, COMBINATION, OR ACTIVITY to which requirement does not apply - Specify, by identifier (and description if space permits) the unit, work practice, or other activity to which the requirement in question does not apply.

CITATION - Cite the requirement as illustrated above.

BRIEF DESCRIPTION OF REQUIREMENT - Describe what the cited provision requires, as stated above.

WHY THE REQUIREMENT DOES NOT APPLY - Briefly explain why the requirement does not apply to the unit, work practice, or activity in question. Cite the regulation that supersedes (or exempts the unit or activity from) the earlier requirement. This page may be used to support page 17, "Streamlining Applicable Requirements" if you are cleaning up obsolete new source review permit terms or streamlining multiple applicable requirements on a single emissions unit.

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS: Supplemental Worksheet, page 1 of 3

COMPANY NAME	DATE	REGISTRATION NO.

1. Unit Ref. No.	2. Type of Tank (Code N)	3. Contents	4. Contents Source (Code O)	5. Shell height	6. Diameter	7. Liquid height	8. Volume	9. Throughput	10. Turnovers	11. Heater Temperature

DEQ Form 805 6/16/97 Optional Page 4 Sheet No. ____

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS, Supplemental Worksheet, page 1 of 3 INSTRUCTIONS

As Code N from the Code List indicates, this form can be used to address at least two kinds of storage tanks. Columns are numbered on pages 1, 2, and 3 of this "Supplemental Tanks *Worksheet*" for the purpose of being used appropriately, depending on the kind of storage tank involved. The sequence is as follows, according to the type of tank:

- (a) **For vertical, fixed-roof tanks**, enter information in Columns 1 and 3 through 18. (Columns 1 through 11 are on this page, while columns 12 through 18, with a repetition of the unit reference number (Column 1), appear on page 2 of the supplemental tanks worksheet (omit page 3).
- (b) For horizontal, fixed-roof tanks, complete columns 1-11, 16 & 17 (omit page 3).
- (c) For floating-roof tanks, enter the information in Columns 1-4, 6, 8, 10, and 17 through 25 on pages 1, 2, and 3 of the supplemental tanks worksheet.

Columns which do not apply to your tank need NOT be filled out; please indicate "N/A" (for "not applicable") where this is the case. Detailed column-by-column instructions follow.

- Column 1. UNIT REFERENCE NUMBER continue the unique assigned reference number(s) from previous pages.
- Column 2. TANK TYPE assign corresponding number(s) (Code N from the Code List).
- **Column 3. CONTENTS** identify the substance stored.
- Column 4. CONTENTS SOURCE assign corresponding number (Code O from the Code List).
- **Column 5. SHELL HEIGHT** indicate the height of the shell, in feet.
- Column 6. DIAMETER list tank diameter, in feet.
- **Column 7. LIQUID HEIGHT** provide the maximum height that liquid can be stored, in feet.
- Column 8. VOLUME indicate the volume of each unit, in gallons of liquid storage.
- Column 9. THROUGHPUT throughput can be calculated as a function of volume times turnovers, or, if known, it can be used to calculate number of turnovers.
- **Column 10. TURNOVERS** Divide volume into throughput (if known) to find turnover, expressed in the same time frame as the throughput.
- Column 11. Heater Temperature If tank is heated, give the maximum temperature, in degrees F; if it is not heated, mark "N/A" ("not applicable").

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS: Supplemental Worksheet, page 2 of 3

COMPANY NAME	DATE	REGISTRATION NO.
COMPANT NAME	DATE	REGISTRATION NO.

1. Unit Ref. No.	12. Roof type	13. Roof height	14. Cone roof slope	15. Dome roof radius	16. Breather vent settings (psig)	17. Shell		18. Primary seal type (Code J)	
Rei. No.				raulus		Color	Shade	Condition	(Code J)

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS, Supplemental Worksheet, page 2 of 3 INSTRUCTIONS

As Code N from the Code List indicates, the form can be used to address at least two kinds of storage tanks. Columns are numbered on pages 1, 2, and 3 of this "Supplemental Tanks *Worksheet*" for the purpose of being used appropriately, depending on the kind of storage tank involved. The sequence is as follows, according to the type of tank:

- (a) **For vertical, fixed-roof tanks**, enter information in Columns 1 and 3 through 18. (Columns 1 through 11 are on this page, while columns 12 through 18, with a repetition of the unit reference number (Column 1), appear on page 2 of the supplemental tanks worksheet (omit page 3).
- (b) For horizontal, fixed-roof tanks, complete columns 1-11, 16 & 17 (omit page 3).
- (c) For floating-roof tanks, enter the information in Columns 1-4, 6, 8, 10, and 17 through 25 on pages 1, 2, and 3 of the supplemental tanks worksheet.

Columns which do not apply to your tank need NOT be filled out; please indicate "N/A" (for "Not applicable") where this is the case. Detailed column-by-column instructions follow.

Column 1. UNIT REFERENCE NUMBER - continue the unique assigned reference number(s) from previous pages. For emissions units with **alternative scenarios**, see the instructions on page 2, "**General Information, continued**," of this Form.

Column 12. ROOF TYPE - indicate whether the roof is shaped as a cone or a dome.

Column 13. ROOF HEIGHT - indicate the height of a vertical roof, in feet.

Column 14. CONE ROOF SLOPE - indicate the slope of the cone roof, if the roof is cone-shaped; this can be derived by using the height of the roof and its diameter.

Column 15. DOME ROOF RADIUS - indicate the radius of the dome, if the roof is dome-shaped.

Column 16. BREATHER VENT SETTINGS - indicate the settings of the breather vents, in pounds per square inch (psig). Defaults for these are -0.03 and +0.03 psig for vacuum and pressure settings.

Column 17. SHELL - indicate the color, shade, and condition of the shell.

Column 18. PRIMARY SEAL TYPE - indicate whether the seal is vapor mounted or liquid mounted, external or internal, as indicated in Code J from the Code List.

Optional Page 5 Instructions

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS: Supplemental Worksheet, page 3 of 3

1. Unit Ref. No.	19. Roof			20. Secondary seal (yes/no)	21. self-	22. No. of columns of	23. Deck type (bolted or welded)
	Color	Shade	Condition	sear (yes/no)	21. self- supporting roof (yes/no)	internal roof	weided)

VOLATILE ORGANIC COMPOUND/PETROLEUM LIQUID STORAGE TANKS, Supplemental Worksheet, page 3 of 3 INSTRUCTIONS

As Code N from the Code List indicates, the form can be used to address at least two kinds of storage tanks. Columns are numbered on pages 1, 2, and 3 of this "Supplemental Tanks *Worksheet*" for the purpose of being used appropriately, depending on the kind of storage tank involved. The sequence is as follows, according to the type of tank:

- (a) **For vertical, fixed-roof tanks**, enter information in Columns 1 and 3 through 18. (Columns 1 through 11 are on this page, while columns 12 through 18, with a repetition of the unit reference number (Column 1), appear on page 2 of the supplemental tanks worksheet (omit page 3).
- (b) For horizontal, fixed-roof tanks, complete columns 1-11, 16 & 17 (omit page 3).
- (c) For floating-roof tanks, enter the information in Columns 1-4, 6, 8, 10, and 17 through 23 on pages 1, 2, and 3 of the supplemental tanks worksheet.

Columns which do not apply to your tank need NOT be filled out; please indicate "N/A" (for "Not applicable") where this is the case. Detailed column-by-column instructions follow.

- Column 1. UNIT REFERENCE NUMBER continue the unique assigned reference number(s) from previous pages.
- Column 19. ROOF as with Column 17, "Shell" (page 2 of the Supplemental Tanks Worksheet), indicate the color, shade, and condition of the roof.
- Column 20. SECONDARY SEAL state "yes" or "no" in the column to indicate whether the unit has a secondary seal.
- Column 21. SELF-SUPPORTING ROOF state "yes" or "no" in the column to indicate whether the unit has a self-supporting roof.
- Column 22. NUMBER OF COLUMNS OF INTERNAL ROOF for tanks with internal roofs, state how many columns support the roof.
- Column 23. DECK TYPE indicate whether the deck is bolted or welded.

VA DEQ FORM 805 APPLICATION CODES

Code A - Equipment

BOILER TYPE:

- 1. Pulverized coal wet bottom
- 2. Pulverized coal dry bottom
- 3. Pulverized coal cyclone furnace
- 4. Spreader stoker
- 5. Chain or traveling grate stoker
- 6. Underfeed stoker
- 7. Hand-fired coal
- 8. Oil, tangentially fired
- 9. Oil, horizontally fired (except rotary cup)
- 10. Gas, tangentially fired
- 11. Gas, horizontally fired
- 12. Wood with flyash reinjection
- 13. Wood without flyash reinjection
- 14. Other (specify)

STATIONARY ENGINE TYPE:

- 15. Combustion turbine
- 16. Internal combustion engine
- 17. Other (specify)

OTHER COMBUSTION UNITS:

- 18. Oven/kiln
- 19. Rotary kiln
- 20. Process furnace
- 99. Other (specify)

Code B - Usage

- 1. Steam production
- 2. Drying/curing
- 3. Space heating
- 4. Process heat
- 5. Food processing
- 6. Electrical generation
- 7. Mechanical work
- 99. Other (specify)

Code C - Incinerator Type

- 1. Rotary kiln
- 2. Mass burn/refuse-derived fuel
- 3. Crematory
- 4. Single chamber
- 5. Multiple chamber
- 99. Other (specify)

Code D - Waste Type

- 1. Paper
- 2. Regulated medical waste
- 3. Municipal
- 4. Animal
- 5. Crematory
- 6. Industrial
- 99. Other (specify)

Code E - Type of Loading

- Overhead loading splash fill, normal service
 Overhead loading submerged fill, normal service
- 3. Bottom loading normal service
- 4. Overhead loading splash fill, balanced service
- 5. Overhead loading submerged fill, balanced service
- 6. Bottom loading balanced service

Code F - Hatch Vapor Closure

- 1. None, open to air
- 2. Emco Wheaton
- 3. OPW

Code F - Hatch Vapor Closure (continued)

- 4. Chiksan LTV
- 99. Other (specify)

Code G - Type of Enclosure

- 1. Open
- 2. Partially open
- 3. Floating roof
- 4. Sealed cover

Code H - Vent/Stack Configuration

- 1. Unobstructed vertical discharge
- 2. Obstructed vertical discharge (e.g., raincap)
- 3. Horizontal or downward discharge (e.g., T-stack)
- 99. Other (specify)

Code I - Air Pollution Control Equipment Type

- 1. Settling chamber
- 2. Cyclone
- 3. Multicyclone
- 4. Cyclone scrubber
- 5. Orifice scrubber
- 6. Mechanical scrubber
- 7. Venturi scrubber
 - a fixed throat
 - b. variable throat
- 8. Mist eliminator
- 9. Electrostatic precipitator
 - a. hot side
 - b. cold side
 - c. high voltage
 - d. low voltage
 - e. single stage
 - f. two stage
 - g. other (specify)
- 10. Filter
- a. baghouse
- b. other (specify)
- 11. Catalytic afterburner
- 12. Direct flame afterburner
- 13. Absorber
 - a. packed tower
 - b. spray tower
 - c. tray tower
 - d. venturi e. other (specify)
- 14. Adsorber
 - a. activated carbon
 - b. molecular sieve
 - c. activated alumina
 - d. silica gel
 - e. other (specify)
- 15. Condenser (specify)
- 99. Other (specify)

Code J - Seal Type

- **EXTERNAL**
- 1. Metallic shoe
 - a. primary only
 - b. shoe-mounted secondary
 - c. rim-mounted secondary
- 2. Liquid-mounted resilient, weather shield
- 3. Vapor-mounted resilient, primary only 4. Liquid-mounted resilient, primary only
 - a. external

Code J - Seal Type (continued)

- b. internal
- a. external b. internal
- 6. Vapor-mounted resilient, primary only

5. Liquid-mounted resilient secondary

a. external

- b. internal
- 7. Vapor-mounted resilient, rim-mounted secondary
 - a. external
 - b. internal
- 99. Other (specify)

Code K - Emission Estimate Method

(provide sample calculations including assumed control efficiency of control equipment to support reported values)

- 1. Stack test (include a copy, or reference by date a report previously provided to DEQ)
- 2. Material balance (cite previously submitted data or include sample of calculations)
- 3. Emission factor (identify source and include sample of calculations)
- 4. Predictive emission model
- 5. CEM data (cite previously submitted data or include a copy of summary)
- 99. Other (describe)

Code L - Fee Exemption Basis

- 1. Carbon monoxide emissions
- 2. VOC HAP emissions already included as VOC emissions for this unit
- 3. PM_{10} HAP emissions already included as PM_{10} emissions for this unit
- 4. $\rm PM_{10}\text{-}sized$ lead emissions already included as $\rm P_{I}\!M$ emissions for this unit
- Title VI pollutants (chlorofluorocarbons and other stratospheric ozone-depleting substances), not also classified as VOCs or HAPs^{*}
- 6. Air pollutant regulated only under § 112(r) of the CAA Listing of these pollutants on page ___, "Annual Air Pollutant Emissions" is optional.

Code M - Coating Use

- 1. Large appliance coatings
- 2. Magnet wire coatings
- 3. Auto and light duty truck coatings
 - a. Prime coat
 - b. Guidecoat
 - c. Topcoat
 - d. Final repair
 - e. Anti-chip
 - f. Anti-chip extreme performance
 - g. Anti-chip visible surface
- 4. Aerospace industries coating
- 5. Magnetic tape coating
- 6. Can coatings
 - a. Base/overvarnish
 - b. Internal body/external ends
 - c. Three-piece can, side seam
 - d. End seals
- 7. Metal coil coating
- 8. Non-printing paper/fabric coating
- 9. Publication printing inks and coatings
- 10. Packaging printing inks and coatings
- 11. Vinyl coatings
- 12. Metal furniture coatings
- 13. Plastic parts and products coating
- 14. Miscellaneous metal parts coatings

Code M - Coating Use (continued)

- a. Clear coatings
- b. Air-dried coatings
- c. Extreme performance coatings
- d. Other coatings
- 15. Flatwood paneling coatings
 - a. printed hardwood/particleboard
 - b. Natural finish hardwood/plywood
 - c. Class II hardboard
- 16. Paper and other webs
- 17. Shipbuilding and ship repair coating

- 18. Wood furniture coating
- 19. Flexographic ink
- 20. Lithographic ink
- 21. Rotogravure ink
- 22. Adhesives describe:
- 23. Other coatings

Code N - Storage Tank Type

- 1. Vertical, fixed roof
- 2. Horizontal
- 3. External, floating roof
- 4. Internal, floating roof
- 5. Underground

Code O - Source of Tank Contents

- 1. Pipeline
- 2. Rail car
- 3. Tank truck
- 4. Ship or barge
- 5. Process
- 6. Other (specify)

Code P - VOC Control Method

- 1. Low-VOC coatings
 - a. High solids coatings
 - b. Low solvent coatings
 - c. Waterborne coatings
 - d. Powder coatings
 - e. UV light/electron beam-cured coatings
 - f. Electrodeposited waterborne coatings
- 2. Increased solids transfer efficiency
- 3. Carbon adsorption
- 4. Incineration
- 5. Enclosures partial _____ % or capture efficiency _____
- 6. Other (describe)